openSUSE

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GNOME User Guide

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About This Guide

This manual introduces you to the GNOME graphical desktop environment as implemented in openSUSE and shows you how to configure it to meet your personal needs and preferences. It also introduces you to several programs and services, including office programs such as OpenOffice.org, Web browsers, file managers, scanning tools, and image editing tools. It is intended for users who have some experience using a graphical desktop environment such as Macintosh*, Windows*, or other Linux desktops.

This guide contains the following parts:

- Part I, “GNOME Desktop” (page 1)
- Part II, “Office and Collaboration” (page 101)
- Part III, “Internet” (page 169)
- Part IV, “Multimedia” (page 181)
- Appendix C, *Getting to Know Linux Software* (page 223)

1 Audience

This guide is intended for users of the GNOME desktop.

2 Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comments feature at the bottom of each page of the online documentation, or go to `http://www.novell.com/documentation/feedback.html` and enter your comments there.

3 Documentation Updates

For the latest version of this documentation, see the http://www.novell.com/documentation/opensuse102 Web site.

4 Additional Documentation

There are other manuals available on this product. If you want to have a look at the other end user documentation for openSUSE, the following manuals might be interesting:

Start-Up
: Guides you through the installation and basic configuration of your system. For newcomers, the manual also introduces basic Linux concepts such as the file system, the user concept and access permissions and gives an overview of the features openSUSE offers to support mobile working. Provides help and advice in troubleshooting.

KDE User Guide
: This manual introduces the KDE desktop of openSUSE and a variety of applications you will encounter when working with the KDE desktop. It guides you through using these applications and helps you perform key tasks. It is intended mainly for end users who want to make efficient use of applications running on the KDE desktop.

openSUSE also comes with a comprehensive manual for system administrators and home users with basic system administration knowledge. Check out *Reference* for advanced system administration tasks and a general understanding of openSUSE.

For an overview of all manuals shipped with openSUSE, refer to http://www.novell.com/documentation/opensuse102/, where you can also download the manuals. You can also access the information online in the Help Center of your desktop.

5 Documentation Conventions

The following typographical conventions are used in this manual:

- `/etc/passwd`: filenames and directory names
- *`placeholder`*: replace *`placeholder`* with the actual value
- `PATH`: the environment variable PATH
- `ls`, `--help`: commands, options, and parameters
- `user`: users or groups
- Alt, Alt + F1: a key to press or a key combination; keys are shown in uppercase as on a keyboard
- *File*, *File* → *Save As*: menu items, buttons
- *Dancing Penguins* (Chapter Penguins, ↑*Reference*): This is a reference to a chapter in another book.

6 About the Making of This Manual

This book is written in Novdoc, a subset of DocBook (see `http://www.docbook.org`). The XML source files were validated by `xmllint`, processed by `xsltproc`, and converted into HTML using a customized version of Norman Walsh's stylesheets.

Part I. GNOME Desktop

Getting Started with the GNOME Desktop

1

This chapter assists you in becoming familiar with the conventions, layout, and common tasks of the GNOME desktop as implemented in SUSE® Linux*.

- Section 1.1, “Logging in and Selecting a Desktop” (page 4)
- Section 1.2, “Logging Out” (page 6)
- Section 1.3, “Desktop Basics” (page 6)
- Section 1.4, “Using the Main Menu” (page 10)
- Section 1.5, “Accessing Folders and Files” (page 14)
- Section 1.6, “Opening or Creating Documents with OpenOffice.org” (page 30)
- Section 1.7, “Exploring the Internet” (page 30)
- Section 1.8, “E-mail and Calendering” (page 30)
- Section 1.9, “Moving Text between Applications” (page 31)
- Section 1.10, “Other Useful Programs” (page 31)
- Section 1.11, “Obtaining Software Updates” (page 32)

1.1 Logging in and Selecting a Desktop

When you start your system, you are prompted to enter your username and password. This is the username and password you created during installation. If you did not install the system, check with your system administrator for the username and password.

The login has three menu items:

- **Login Prompt:** Enter your username and password to log in.
- **Session:** Specify the desktop to run during your session. If other desktops are installed, they appear in the list.
- **Actions:** Perform a system action, such as shut down the computer, reboot the computer, or configure the Login Manager.
- Section 1.1.1, “What Is a Session?” (page 4)
- Section 1.1.2, “Switching Desktops” (page 5)
- Section 1.1.3, “Locking Your Screen” (page 5)

1.1.1 What Is a Session?

A *session* is the period of time from when you log in to when you log out. The login screen offers several login options. For example, you can select the language of your session so that text that appears in the interface is presented in that language.

After your username and password are authenticated, the Session Manager starts. The Session Manager lets you save certain settings for each session. It also lets you save the state of your most recent session and return to that session the next time you log in.

The Session Manager can save and restore the following settings:

- Appearance and behavior settings, such as fonts, colors, and mouse settings.
- Applications that you were running. such as a file manager or an OpenOffice.org program.

TIP

You cannot save and restore applications that Session Manager does not manage. For example, if you start the vi editor from the command line in a terminal window, Session Manager cannot restore your editing session.

For information on configuring session preferences, see Section 2.4.8, "Managing Sessions" (page 90).

1.1.2 Switching Desktops

If you installed both the GNOME and the KDE desktops, use the following instructions to switch desktops.

1. Click *Computer* → *Logout* → *Ok*.

   In KDE, click *N* → *Logout* → *Logout*.

2. On the login screen, click *Session*.

3. Select the desktop you want (*GNOME* or *KDE*), then click *OK*.

4. Type your username, then press Enter.

5. Type your password, then press Enter.

1.1.3 Locking Your Screen

To lock the screen, you can do either of the following:

- Click *Computer* → *Lock Screen*.
- If the *Lock* button is present on a panel, click it.

  To add the *Lock* button to a panel, right-click the panel and then click *Add to Panel* → *Actions* → *Lock*.

When you lock your screen, the screen saver starts. To lock your screen correctly, you must have a screen saver enabled. To unlock the screen, move your mouse to display the locked screen dialog. Enter your username and password, then press Enter.

For information on configuring your screen saver, see Section 2.2.5, “Configuring the Screen Saver” (page 69).

1.2 Logging Out

When you are finished using the computer, click *Computer* → *Logout*. Then select one of the following:

- *Log out*

  Logs you out of the current session and returns you to the Login dialog.

- *Shut down*

  Logs you out of the current session, then turns off the computer.

- *Restart the computer*

  Logs you out of the current session, then restarts the computer.

- *Suspend the computer*

  Saves the current memory contents to disk and shuts down the computer. When you restart, the saved memory content is loaded and you can resume where you left off.

1.3 Desktop Basics

As with other common desktop products, the main components of the GNOME desktop are icons that link to files, folders, or programs, as well as the panel at the bottom of the screen (similar to the Task Bar in Windows). Double-click an icon to start its associated program. Right-click an icon to access additional menus and options. You can also right-click any empty space on the desktop to access additional menus for configuring or managing the desktop itself.

By default, the desktop features two key icons: your personal Home folder, and a trash can for deleted items. Other icons representing devices on your computer, such as CD drives, might also be present on the desktop. If you double-click your Home folder, the Nautilus file manager starts and displays the contents of your home directory. For more information about using Nautilus, see Section 1.5.1, “Managing Folders and Files with the File Manager” (page 14).

Right-clicking an icon displays a menu offering file operations, like copying, cutting, or renaming. Selecting *Properties* from the menu displays a configuration dialog. The title of an icon as well as the icon itself can be changed with *Select Custom Icon*. The Emblems tab lets you add graphical descriptive symbols to the icon. The Permissions tab lets you set access permissions for the selected files. The Notes tab lets you manage comments. The menu for the trash can additionally features the *Empty Trash* option, which deletes its contents.

A link is a special type of file that points to another file or folder. When you perform an action on a link, the action is performed on the file or folder the link points to. When you delete a link, you delete only the link file, not the file that the link points to.

To create a link on the desktop to a folder or a file, access the object in question in File Manager by right-clicking the object and then clicking *Make Link*. Drag the link from the File Manager window and drop it onto the desktop.

- Section 1.3.1, “Default Desktop Icons” (page 7)
- Section 1.3.2, “Desktop Menu” (page 8)
- Section 1.3.3, “Bottom Panel” (page 8)
- Section 1.3.4, “Adding Applets and Applications to the Panel” (page 9)

1.3.1 Default Desktop Icons

To remove an icon from the desktop, simply drag it onto the trash can. However, be careful with this option—if you move folder or file icons to the trash can, the actual data is deleted. If the icons only represent links to a file or to a directory, only the links are deleted.

NOTE

You cannot move the Home icon to the trash.

1.3.2 Desktop Menu

Right-clicking an empty spot on the desktop displays a menu with various options. Click *Create Folder* to create a new folder. Create a launcher icon for an application with *Create Launcher*. Provide the name of the application and the command for starting it, then select an icon to represent it. You can also change the desktop background and align desktop icons.

1.3.3 Bottom Panel

The desktop includes a panel across the bottom of the screen. The bottom panel contains the Computer menu (similar to the Start menu in Windows) and the icons of all applications currently running. You can also add applications and applets to the panel for easy access. If you click the name of a program in the taskbar, the program's window is moved to the foreground. If the program is already in the foreground, a mouse click minimizes it. Clicking a minimized application reopens the respective window.

Figure 1.1 *GNOME Bottom Panel*

The *Show Desktop* icon is on the right side of the bottom panel. This icon minimizes all program windows and displays the desktop. Or, if all windows are already minimized, it opens them up again.

If you right-click an empty spot in the panel, a menu opens, offering the options listed in the following table:

Table 1.1 *Panel Menu Options*

Option	Description
Add to Panel	Opens a menu list of applications and applets that can be added to the panel.
Properties	Modifies the properties for this panel.
Delete This Panel	Removes the panel from the desktop. All of the panel settings are lost.
New Panel	Creates a new panel and adds it to the desktop.
Help	Opens the Help Center.
About Panels	Opens information about the panel application.

1.3.4 Adding Applets and Applications to the Panel

You can add applications and applets to the bottom panel for quick access. An applet is a small program, while an application is usually a more robust stand-alone program. Adding an applet puts useful utilities where you can easily access them.

The GNOME desktop comes with many applets. You can see a complete list by right-clicking the bottom panel and selecting *Add to Panel*. Some useful applets include the following:

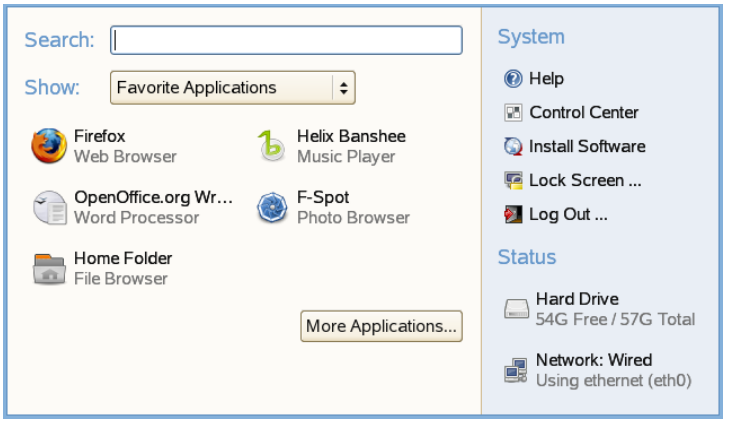
Table 1.2 *Some Useful Applets*

Applet	Description
Dictionary Lookup	Look up a word in an online dictionary.
Force Quit	Terminate an application. This is especially useful if you want to terminate an application that is no longer responding.
Search for Files	Find files, folders, and documents on the computer.
Sticky Notes	Create, display, and manage sticky notes on your desktop.
Traditional Main Menu	Access programs from a menu like the one in previous versions of GNOME. This is especially useful for people who are used to earlier versions of GNOME.
Volume Control	Increase or decrease the sound volume.
Weather Report	Display current weather information for a specified city.
Workspace Switcher	Access additional work areas, called workspaces, through virtual desktops. For example, you can open applications in different workspaces and use them on their own desktops without the clutter from other applications.

1.4 Using the Main Menu

Open the main menu by clicking *Computer* on the far left of the bottom panel. Commonly used applications appear in the main menu. A search field lets you quickly search for applications and files. You can access additional applications, listed in categories, by clicking *More Applications*.

Figure 1.2 *Main Menu*



The main menu contains several elements. Each of these elements is described in the following sections.

- Section 1.4.1, “Search Bar” (page 11)
- Section 1.4.2, “Show Menu” (page 11)
- Section 1.4.3, “System” (page 13)
- Section 1.4.4, “Status” (page 13)

1.4.1 Search Bar

The search bar helps you find applications and files on your system. For more information about using the GNOME desktop’s search function, see Section 1.5.3, “Finding Files on Your Computer” (page 21).

1.4.2 Show Menu

You can determine which icons appear in the main menu by clicking the *Show* menu. There are three available views:

- Section “Favorite Applications” (page 12)

- Section “Recently Used Applications” (page 12)
- Section “Recent Documents” (page 13)

Favorite Applications

By default, the Favorite Applications menu shows icons for several commonly used applications. Use this view to show the applications you use most often.

To add an item to your Favorite Applications:

1. Click *ComputerMore Applications*.
2. Right-click the application you want to add.
3. Select *Add to Favorites*.

   The selected application is added to your Favorite Applications.

To remove an item from your Favorite Applications:

1. Click *Computer*.
2. Make sure that your Favorite Applications appear in the main menu.

   If *Favorite Applications* does not appear in the *Show* menu, click the menu and select *Favorite Applications*.
3. Right-click the item you want to remove.
4. Select *Remove from Favorites*.

   The removed application no longer appears in your Favorite Applications.

Recently Used Applications

Recently Used Applications shows the last several applications you have started. Use this view to quickly find applications you have used recently.

Recent Documents

Recent Documents shows the last several documents you have opened. Use this view to quickly locate the documents you worked on most recently.

1.4.3 System

System provides shortcuts to several system applications.

Table 1.3 *System Shortcuts*

Application	Description
Help	Opens the Help Center, which provides online documentation for your system.
Control Center	Helps you customize and configure your system. For more information, see Chapter 2, *Customizing Your Settings* (page 35).
Install Software	Opens the Software Installer, which guides you through the process of installing new software.
Lock Screen	Locks your system so nobody can access it while you are away. Enter your password to unlock the system.
Log Out	Opens the Log Out dialog, where you can log out, shut down or restart your system, or suspend the computer.

1.4.4 Status

Status displays information about your hard drive and network connection, including the amount of available space on your hard disk and the type of network connection you are using.

1.5 Accessing Folders and Files

You can access folders and files on your computer and on a network.

- Section 1.5.1, “Managing Folders and Files with the File Manager” (page 14)
- Section 1.5.2, “Accessing Floppy Disks, CDs, or DVDs” (page 20)
- Section 1.5.3, “Finding Files on Your Computer” (page 21)
- Section 1.5.4, “Accessing Files on the Network” (page 25)

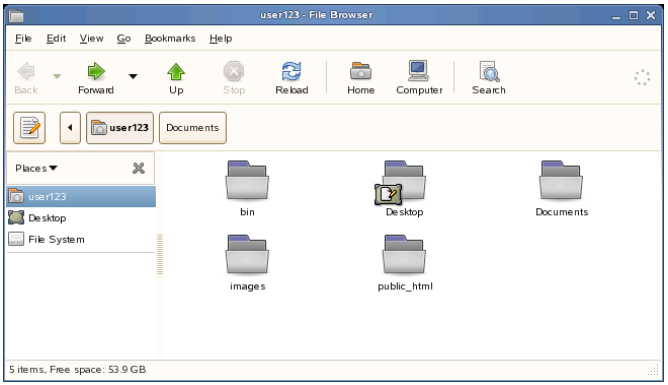
1.5.1 Managing Folders and Files with the File Manager

Use the File Manager to create and view folders and documents, run scripts, and create CDs of your data. In addition, the File Manager provides support for Web and file viewing.

You can open the File Manager in the following ways:

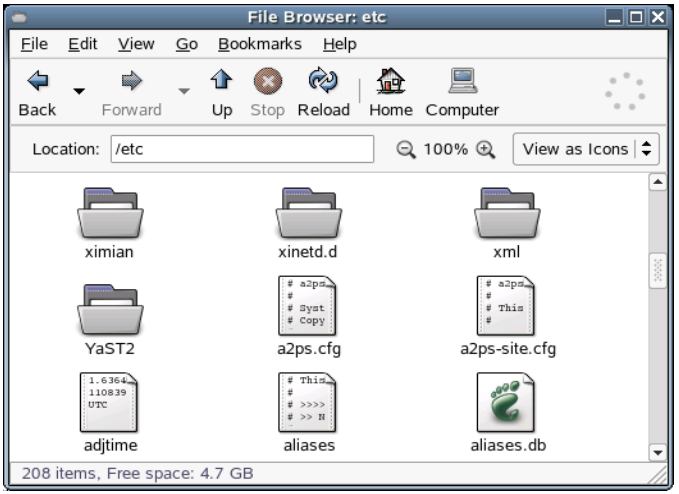
- Click *Computer* → *Home Folder*
- Double-click your Home directory icon on the desktop.
- Click *Computer* → *More Applications* → *File Manager*.

Figure 1.3 *File Manager*



You can change to the browser mode by right-clicking the folder, then clicking *Browse Folder*. This gives you a familiar view with a location window that shows the current path and buttons for common functions. This applies to the current File Manager window.

Figure 1.4 *File Manager in Browser Mode*



Some simple shortcuts for navigating in the File Manager include the following:

Table 1.4 *File Manager Navigation Shortcuts*

Shortcut	Description
<— or Alt + ↑	Opens the parent folder.
↑ or ↓	Selects an item.
Alt + ↓, or Enter	Opens an item.
Shift + Alt + ↓	Opens an item and closes the current folder.
Shift + Alt + ↑	Opens the parent folder and closes the current folder.
Shift + Ctrl + W	Closes all parent folders.
Ctrl + L	Opens a location by specifying a path or URL.
Alt + Home	Opens your home directory.

For more information, click *Help* → *Contents* in the File Manager.

You can change the File Manager preferences by clicking *Edit* → *Preferences*. The configurable preferences are organized on five tabs:

- Section “Views” (page 17)
- Section “Behavior” (page 18)
- Section “Display” (page 19)
- Section “List Columns” (page 19)
- Section “Preview” (page 19)

Views

To configure the appearance of the File Manager, click *Edit* → *Preferences* → *Views*, then select from the following options:

Table 1.5 *File Manager Views Options*

Section	Option	Description
Default View	View new folders using	Determines whether new folders are displayed as icons or as a list.
	Arrange items	Sets the order items are listed in. Items can be listed by name, size, type, modification date, or emblems.
	Sort folder before files	Places this folder at the top of the list, if this check box is selected (the default).
	Show hidden and backup files	Shows hidden files and backup files in your directories. If this check box is not selected (the default), hidden and backup files do not appear.
Icon View Defaults	Default zoom level	Sets the size of items that appear in the File Manager.
	Use compact layout	Displays items closer together.
	Text beside icons	Displays icon captions next to the icons, rather than under them.
List View Defaults	Default zoom level	Determines the size of items that appear in the list view.
Tree View Defaults	Show only folders	When selected, displays on folders in the tree in the side pane.

Behavior

To configure the behavior of the File Manager, click *Edit* → *Preferences* → *Behavior*, then select from the following options:

Table 1.6 *File Manager Behavior Options*

Option	Description
Single Click to Activate Item	Performs the default action for an item when you click the item. If this option is selected and you point to an item, the title of the item is underlined.
Double Click to Activate Items	Performs the default action for an item when you double-click the item.
Always Open in Browser Windows	Opens the File Manager in Browser mode whenever you open it.
Run Executable Files When They Are Clicked	Runs an executable file when you click the file. An executable file is a text file than can execute (that is, a shell script).
View Executable Files When They Are Clicked	Displays the contents of an executable file when you click the file.
Ask Each Time	Displays a dialog when you click an executable file. The dialog asks whether you want to execute the file or display the file.
Ask Before Emptying Trash or Deleting Files	Displays a confirmation message before the Trash is emptied or before files are deleted.
Include a Delete Command That Bypasses Trash	Adds a *Delete* menu item to the *Edit* menu and the pop-up menu that is displayed when you right-click a file, folder, or desktop object. When you select an item

Option	Description
	and click *Delete*, the item is immediately deleted from your file system.

Display

To configure the way icon captions and dates appear in the File Manager, click *Edit* → *Preferences* → *Display*, then select from the following options:

Table 1.7 *File Manager Display Options*

Option	Description
Icon captions	Sets the order of information to appear beneath icon names. You can set three information types, in the order that they appear.
Date	Configures the date format.

List Columns

To configure the columns that appear in the File Manager, as well as the order in which they appear, click *Edit* → *Preferences* → *List*.

Select the columns that you want to appear. To change the order, click *Move Up* or *Move Down*.

Preview

To configure how file previews appear in the File Manager and whether or not folders show the number of items they contain, click *Edit* → *Preferences*, then set the following options:

Table 1.8 *File Manager Preview Options*

Option	Description
Show text in icons	Specifies when to preview the content of text files in the icons that represent the files.
Show thumbnails	Specifies when to show thumbnails of image files in the icons that represent the files.
Only for files smaller than	Specifies the maximum file size for files represented by thumbnails.
Preview sound files	Specifies when to preview sound files.
Count number of items	Specifies when to show the number of files contained in folders. In the Icon view, you might need to increase your zoom level to see the number.

1.5.2 Accessing Floppy Disks, CDs, or DVDs

To access floppy disks, CDs, or DVDs, insert the medium into the appropriate drive. For several types of removable media, a File Manager window pops up automatically when the media is inserted or attached to the computer. If File Manager does not open, double-click the icon for that drive to view the contents.

WARNING

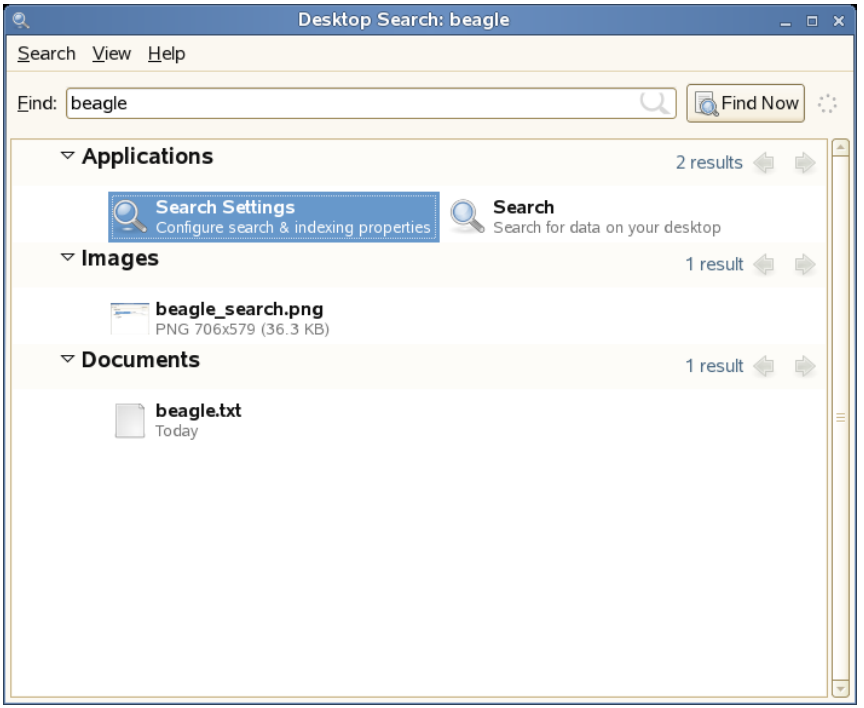
Do not simply remove disks from the drive after using them. Floppy disks, CDs, and DVDs must always be unmounted from the system first. Close all File Manager sessions still accessing the medium, then right-click the icon for the medium and select *Eject* from the menu. Then safely remove the floppy disk or CD when the tray opens automatically.

Floppy disks can also be formatted by clicking *Computer* → *More Applicatiodns* → *System* → *Floppy Formatter*. In the Floppy Formatter dialog, select the density of the floppy disk and the file system settings: Linux native (ext2), the file system for Linux, or DOS (FAT) to use the floppy with Windows systems.

1.5.3 Finding Files on Your Computer

To locate files on your computer, click *Computer*, enter your search terms in the *Search* field, then press Enter. The results are displayed in the Desktop Search dialog box.

Figure 1.5 *Desktop Search Dialog Box*



You can use the results lists to open a file, forward it via e-mail, or display it in the file manager. Simply right-click an item in the results list and select the option you want. The options available for an item in the results list depend on the type of file it is. Clicking a file in the list displays a preview of the file and information such as the title, path, and when the file was last modified or accessed.

Use the *Search* menu to limit your search to files in a specific location, such as your address book or Web pages, or to display only a specific type of file in your results list. The *Sort* menu lets you sort the items in your results list according to name, relevance, or the date the file was last modified.

You can also access Desktop Search by clicking *Computer* → *More Applications* → *System* → *Beagle Search Tool* pressing F12, or clicking on the bottom panel.

Search Tips

- You can use both upper and lowercase letters in search terms. Searches are not case sensitive by default.

  To perform a case sensitive search, put double quotation marks (“) around the word you want to match exactly. For example, if you use “APPLE” in a search, apple would be ignored.

- To search for optional terms, use OR (for example, apples OR oranges).

  IMPORTANT

  The OR is case-sensitive when used to indicate optional search terms.

- To exclude search terms, use a minus sign (-) in front of the term you want to exclude (for example, apples -oranges would find results containing apples but not oranges).

- To search for an exact phrase or word, put quotation marks (“) around the phrase or word.

- Common words such as “a,” “the,” and “is” are ignored.

- The base form of a search term is used when searching (for example, a search for “driving” will match “drive,” “drives,” and “driven”).

Performing a Property Search

By default, the Beagle search tool looks for search terms in the text of documents and in their properties. To search for a word in a particular property, use *property_keyword*:*query*. For example, `author:john` searches for files that have "john" listed in the Author property.

Table 1.9 *Supported Property Keywords*

Keyword	Property
album	Album of the media
artist	Artist
author	Author of the content
comment	User comments
creator	Creator of the content
extension or ext	File extension (for example, extension:jpeg or ext:mp3). Use extension:or ext: to search in files with no extension.
mailfrom	E-mail sender name
mailfromaddr	E-mail sender address
mailinglist	Mailing list ID
mailto	E-mail recipient name
mailtoaddr	E-mail recipient address
tag	FSpot and Digikam image tags
title	Title

Property searches follow the rules mentioned in Section "Search Tips" (page 22). You can use property searches as an exclusion query or OR query, and phrases can be used as *query*. For example, the following line will search for all PDF or HTML documents containing the word "apple" whose author property contains "john" and whose title does not contain the word "oranges."

```
apple ext:pdf OR ext:html author:john -title:oranges
```

Setting Search and Indexing Preferences

Use the Search Preferences dialog box to set search and indexing preferences. To open Search Preferences, click *Computer* → *More Applications* → *Beagle Settings*. You can also click *Search* → *Preferences* in the Desktop Search dialog box.

On the Search tabbed page, click *Start search & indexing services automatically* to start the search daemon when you log in (this is selected by default). You can also choose the keystrokes that will display the Desktop Search window by specifying any combination of Ctrl, Alt, and a function key. F12 is the default keystroke.

On the *Indexing* tabbed page, you can choose to index your home directory (selected by default), to not index your home directory, and to add additional directories to index. Make sure you have rights to the directories you add. You can also specify resources that you don't want indexed (see Section "Preventing Files and Directories from Being Indexed" (page 24) for more information).

Preventing Files and Directories from Being Indexed

Use the Search Preferences dialog box to specify resources that you don't want indexed. These resources can include directories, patterns, mail folders, or types of objects.

1. Click *Computer* → *More Applications* → *System* → *Search Settings*.
2. On the Indexing tabbed page, click *Add* in the Privacy section.
3. Select a resource to exclude from indexing, then specify the path to the resource.
4. Click *OK* twice.

1.5.4 Accessing Files on the Network

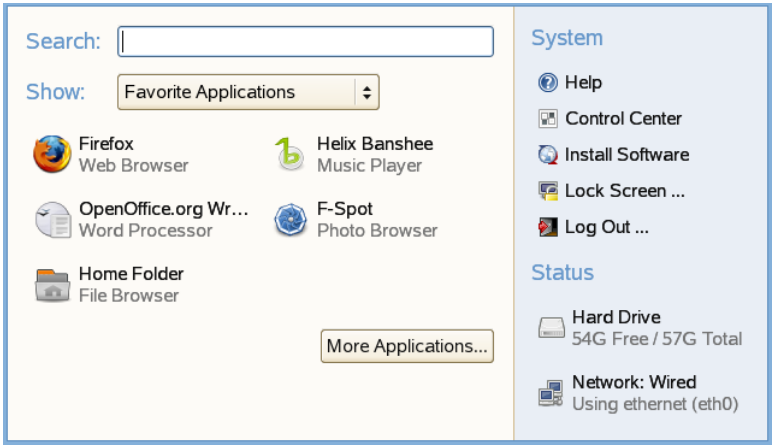
This chapter helps you access network resources using the following tasks:

- Section “Connecting to Your Network” (page 25)
- Section “Managing Network Connections” (page 27)
- Section “Accessing Network Shares” (page 28)
- Section “Sharing Directories from Your Computer” (page 29)

Connecting to Your Network

You can connect to a network with wired and wireless connections. To view your network connection status, click *Computer.* In the *Status* area of the main menu, The *Network Connections* icon shows your network connection status. For example, in the following figure, the computer is connected to a wired network using an Ethernet connection.

Figure 1.6 *Network Connections Icon in the Main Menu*



Click on the icon to get information about your connection, such as IP address, gateway address, and similar details.

Connecting to a Wired Connection

1. Make sure that an Ethernet cable is connected to your computer's network interface card.

2. Click the *Network Connections* icon on the main panel, then click *Ethernet: eth0*.

After a wired network connection is established, the *Network Connections* icon changes to show your connection type.

A connection to the network is confirmed when *Wired* is listed next to the *Network* menu item. You can also confirm connectivity by clicking the *Network Connections* icon. If connected, the Connection Information window displays your IP address and other details about your connection.

Connecting to a Wireless Connection

1. Make sure that your computer contains a wireless network interface card.

2. Click the *Network* icon on the main menu, then click *Wireless: <device>*.

The Network Connections icon changes to a wireless signal strength bar, and any detected wireless networks are displayed in the *Network Connections* menu.

If your network name is displayed, select the network name from the *Network Connections* menu. After you are connected, the *Network* icon shows that you have a wireless connection.

If you do not see your wireless network name in the *Network Connections* menu:

1. Click the *Network* icon on the main panel, then click *Other*.

2. In the Specify an ESSID dialog, type the wireless network name in the *ESSID:* field.

3. (Conditional) If the wireless network is encrypted, click *Show Encryption Key* to display the *Encryption Key* field.

4. Type the encryption code, then click *OK*.

Your wireless network's name should now appear in the *Network Connections* menu.

5 Select the wireless network's name.

Upon connection, the *Network* icon turns blue.

You can also confirm connection by clicking the *Network* icon and viewing *Connection Information*. If connected, your IP address and other details are displayed in the Connection Information dialog.

Managing Network Connections

The *Network* icon lets you monitor, manage, and configure your network connections. Clicking the icon opens a window that displays which network connection is active, if you have more than one network device in your computer.

For example, if your laptop computer is configured to use a wireless port and a port for a network cable, you will see two network connections in the list.

If you are connected to the network via a cable and need to switch to use your wireless, simply click the *Network* icon and then click *Wireless: eth1*. This switches your network connection and acquires a new IP address, if needed.

IMPORTANT

Prior to making the change, you should save any data, because the change in services might require that certain applications or services be restarted.

Using the menu, you can view connection informations such as the IP address being used and your hardware address.

If you need to update or make changes to your network settings, click *Computer* → *Control Panel* → *Network Card*. This launches the Network Card Setup wizard, which steps you through the configuration process. Using this option requires you to provide the password for root.

Accessing Network Shares

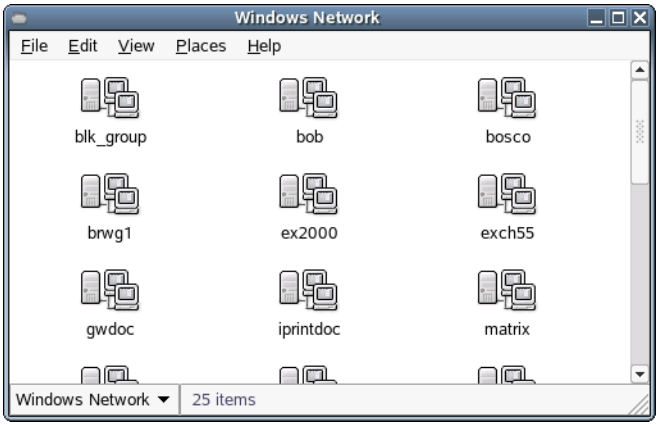
Other network devices, like workstations and servers, can be set up to share some or all of their resources. Typically, files and folders are marked to let remote users access them. These are called *network shares*. If your system is configured to access network shares, you can use Nautilus File Manager to access them.

To access network shares, double-click *Computer → Home Folder*, then click *Network Servers*. The window displays the network shares that you can access. Double-click the network resource that you want to access. You might be required to authenticate to the resource by providing a username and password.

To access NFS shares, double-click the *UNIX Network* icon. A list of UNIX shares available to you is displayed.

To access Windows shares, double-click the *Windows Network* icon. The Windows shares available to you are displayed.

Figure 1.7 *Workgroups on a Windows Network*



Adding a Network Place

1. Click *Computer → Home Folder → File → Connect to Server*.
2. Specify the name you want displayed for this link and its URL, then click *Connect*.

   An icon for the network place is added to the desktop.

Sharing Directories from Your Computer

You can make directories on your computer available to other users on your network.

Enabling Sharing

Use YaST to enable sharing on your computer. In order to enable sharing, you must have root privileges and be a member of a workgroup or domain.

1. Click *Computer* → *More Applications* → *System* → *YaST*.
2. In YaST, click *Network Services* → *Windows Domain Membership*.
3. In the Windows Domain Membership module, click *Allow Users To Share Their Directories*.
4. Click *Finish*.

Sharing a Directory

If directory sharing is enabled on your computer, use the following steps to configure a directory to be shared.

1. Open the File Manager and browse to the directory you want to share.
2. Right-click the folder for the directory you want to share, then click *Sharing Options*.
3. Select the *Share this folder* check box, then type the name you want to use for this share.
4. If you want other users to be able to copy files to your shared directory, select the *Allow other people to write in this folder* check box.
5. (Optional) Type a comment, if desired.
6. Click *Create Share*.

1.6 Opening or Creating Documents with OpenOffice.org

For creating and editing documents, OpenOffice.org is installed with the GNOME desktop. OpenOffice.org is a complete set of office tools that can both read and save Microsoft Office file formats. OpenOffice.org has a word processor, a spreadsheet, a data base, a drawing tool, and a presentation program. To get started, click *Computer* → *OpenOffice.org Writer* or select an OpenOffice.org module by clicking *Computer* → *More Applications* → *Office*, then select the module you want to open.

A number of sample documents and templates are included with OpenOffice.org. You can access the templates by clicking *File* → *New* → *Templates*. In addition, you can use wizards, which guide you through the creation of letters and other typical documents.

For a more in-depth introduction to OpenOffice.org, see Chapter 3, *The OpenOffice.org Office Suite* (page 103) or view the help in any OpenOffice.org program.

1.7 Exploring the Internet

The GNOME Desktop includes Firefox, a Mozilla* based Web browser. You can start it by clicking *Computer* → *Firefox*.

You can type an address into the location bar at the top or click links in a page to move to different pages, just like in any other Web browser.

For more information, see Chapter 7, *Browsing with Firefox* (page 171).

1.8 E-mail and Calendering

Novell Evolution seamlessly combines e-mail, a calendar, an address book, and a task list in one easy-to-use application. With its extensive support for communications and data interchange standards, Evolution can work with existing corporate networks and applications, including Microsoft Exchange.

To start Evolution, click *Computer* → *More Applications* → *Office* → *Evolution*.

The first time you start it, Evolution prompts you with a few questions as it sets up a mail account and helps you import mail from your old mail client. Then it shows you how many new messages you have and lists upcoming appointments and tasks, as well as the current weather and news from news feeds. The calendar, address book, and mail tools are available in the shortcut bar on the left.

For more information, see Chapter 4, *Evolution: E-Mail and Calendaring* (page 137).

1.9 Moving Text between Applications

To copy text between applications, select the text and then move the mouse cursor to the position where you want the text copied. Click the center button on the mouse or the scroll wheel to copy the text.

When copying information between programs, you must keep the source program open and paste the text before closing it. When a program closes, any content from that application that is on the clipboard is lost.

1.10 Other Useful Programs

In addition to the programs already discussed, like applets you can add to a panel, the system also includes additional programs, organized in categories in the Application Browser. To access the programs, open the Application Browser by clicking *ComputerMore Applications*, then browse through the categories to see which applications are available. Categories include the following:

Table 1.10 *Applications*

Category	Types of Programs
New Applications	Newly installed applications
Applications	Applications for browsing files and other uses
Development	Web development, MONO documentation, sharing files between computers

Category	Types of Programs
Edutainment	Educational games and applications
Games	Card games, arcade favorites, and puzzles
Graphics	Image viewers and editors, drawing programs, photo browsers, scanning programs
Internet	Applications for browsing the Internet and your computer's file system
Multimedia	Music players, CD database, video editors, CD and DVD burners, volume controllers, and other audio and video applications
Office	Word processors and text editors, spreadsheets, presentation software, database software, project management utilities, PDF reader, personal information managers, calendars
System	Applications for configuring and managing your system
Utilities	System customization, search configuration, calculators, and other tools

Following chapters in this guide describe some of the more commonly used applications.

1.11 Obtaining Software Updates

Novell offers important updates and enhancements that help protect your computer and ensure that it runs smoothly through ZENworks®. The Software Update feature is designed to help you manage the software you have on your computer and to install, update, and remove programs without your having to track dependencies and resolve conflicts. Contact your system administrator for more information about how your company is disseminating updates.

To access the update tool, click *Computer* → *More Applications* → *System* → *Update Software*.

If updates are available, the ZEN Update icon appears in the notification area of the bottom panel. In this case, click the icon to access the update tool.

2 Customizing Your Settings

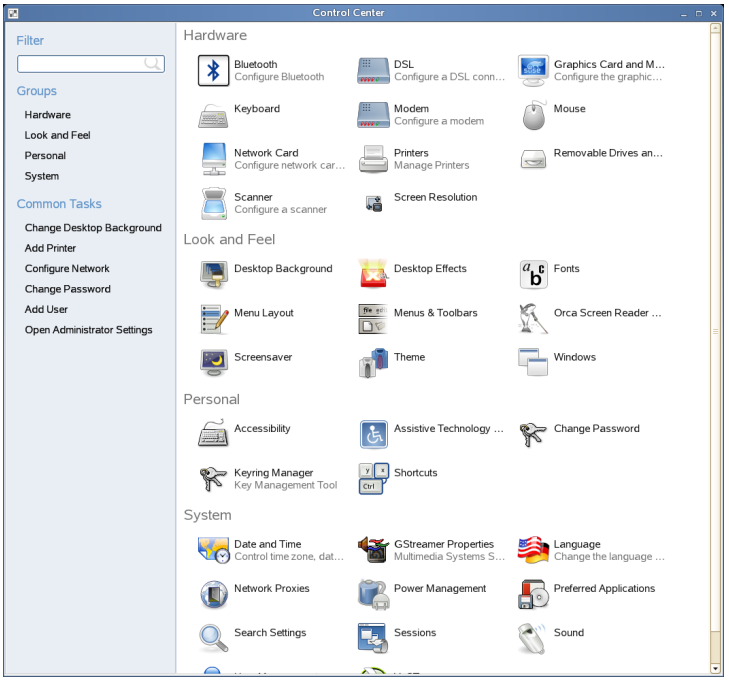
You can change the way the GNOME desktop looks and behaves to suit your own personal tastes and needs. Some of the settings you might want to change include:

- Keyboard and mouse configuration (see Section 2.1.4, “Modifying Keyboard Preferences” (page 38) and Section 2.1.6, “Configuring the Mouse” (page 43))
- Desktop background (see Section 2.2.1, “Changing the Desktop Background” (page 50))
- Screen saver (see Section 2.2.5, “Configuring the Screen Saver” (page 69))
- Password (see Section 2.3.3, “Changing Your Password” (page 78))
- Sounds (see Section 2.4.9, “Setting Sound Preferences” (page 95))

These settings and others can be changed in the Control Center. To access the Control Center, click *Computer* → *Control Center*. The Control Center is divided into the following four categories:

- Section 2.1, “Hardware” (page 36)
- Section 2.2, “Look and Feel” (page 50)
- Section 2.3, “Personal” (page 74)
- Section 2.4, “System” (page 80)

Figure 2.1 *GNOME Control Center*



Some settings require that you use the YaST Control Center. These administrator settings includes most of the hardware, the graphical user interface, Internet access, security settings, user administration, software installation, and system updates and information. You need the root password to access the YaST Control Center.

For information on configuring administrator settings, see Using YaST to Configure the SUSE Linux Enterprise Desktop [`http://www.novell.com/documentation/nld/nld_deployment/data/bsj9luh.html`] in the *Deployment Guide*.

2.1 Hardware

Hardware settings include the following:

- Section 2.1.1, “Configuring Bluetooth Services” (page 37)

- Section 2.1.2, “Configuring Your DSL Connection” (page 37)
- Section 2.1.3, “Configuring Your Graphics Card and Monitor” (page 38)
- Section 2.1.4, “Modifying Keyboard Preferences” (page 38)
- Section 2.1.5, “Configuring a Modem” (page 42)
- Section 2.1.6, “Configuring the Mouse” (page 43)
- Section 2.1.7, “Configuring a Network Card” (page 46)
- Section 2.1.8, “Installing and Configuring Printers” (page 47)
- Section 2.1.9, “Configuring Removable Drives and Media” (page 47)
- Section 2.1.10, “Configuring a Scanner” (page 48)
- Section 2.1.11, “Specifying Screen Resolution Settings” (page 49)

2.1.1 Configuring Bluetooth Services

Bluetooth services enable you to connect wireless devices such as mobile phones and personal data assistants (PDAs) to your computer. Bluetooth wireless support includes automatic recognition of Bluetooth-enabled devices via the YaST central configuration and administration tool. Click *Computer* → *Control Center* → *Hardware* → *Bluetooth*, then set the configuration options that are appropriate for your device.

NOTE

Root privileges are required for configuring Bluetooth services.

2.1.2 Configuring Your DSL Connection

If you connect to a network over a DSL Connection, use this option to configure your connection. The DSL connection is configured in YaST.

NOTE

Root privileges are required for configuring your DSL Connection.

1. Click *Computer → Control Center → Hardware → DSL*.
2. Enter the root password.

   YaST opens.
3. Follow the instructions in YaST to configure DSL.

2.1.3 Configuring Your Graphics Card and Monitor

Your graphics card was configured for your monitor during installation. If you ever need to change these settings, click *Computer → Control Center → Hardware → Graphics Card and Monitor*, then set the appropriate options for your monitor.

NOTE

Graphics card configuration is done in YaST2 and requires root privileges.

2.1.4 Modifying Keyboard Preferences

Use the Keyboard Preferences tool to modify the autorepeat preferences for your keyboard and to configure typing break settings.

Click *Computer → Control Center → Hardware → Keyboard*.

You can set the following preferences:

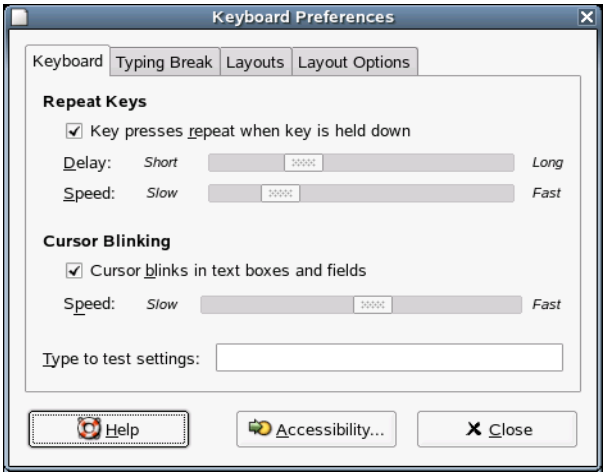
- Keyboard
- Typing Break
- Layouts

- Layout Options

Configuring Keyboard Preferences

Use the Keyboard tabbed page to set general keyboard preferences.

Figure 2.2 *Keyboard Preferences Dialog—Keyboard Page*



You can modify any of the following keyboard preferences:

Table 2.1 *Keyboard Preferences*

Option	Description
Key Presses Repeat When Key is Held Down	Enables keyboard repeat. The action associated with a key is performed repeatedly when you press and hold that key. For example, if you press and hold a character key, the character is typed repeatedly. Use the *Delay* option to select the delay from the time you press a key to the time that the action repeats. Use the *Speed* option to set the speed at which the action is repeated.

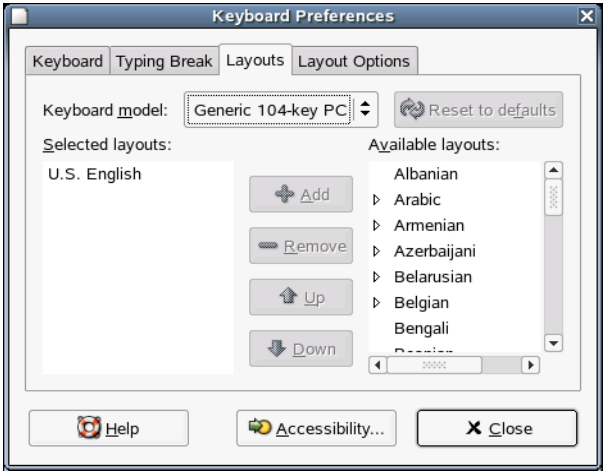
Option	Description
Cursor Blinks in Text Boxes and Fields	Lets the cursor blink in fields and text boxes. Use the slider to specify the speed at which the cursor blinks.
Type to Test Settings	The test area is an interactive interface that lets you see how the keyboard settings affect the display as you type. Type text in the test area to test the effect of your settings.

Click the *Accessibility* button to start the Keyboard accessibility preference tool.

Configuring Keyboard Layout Preferences

Use the Layouts tabbed page to set your keyboard layout.

Figure 2.3 *Keyboard Preferences Dialog—Layouts Page*



Select your keyboard model from the drop-down list, then use the navigational buttons to add or remove the selected layout to or from the list of available layouts.

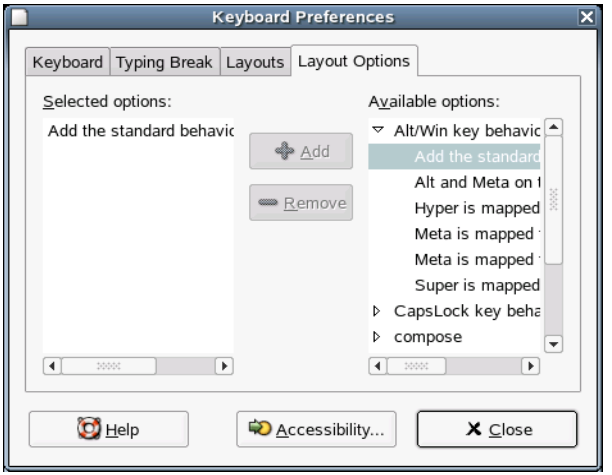
You can select different layouts to suit different locales.

Click the *Accessibility* button to start the Keyboard accessibility preference tool.

Configuring Keyboard Layout Options

Use the Layout Options tabbed page to set your keyboard layout options.

Figure 2.4 *Keyboard Preferences Dialog—Layout Options Page*



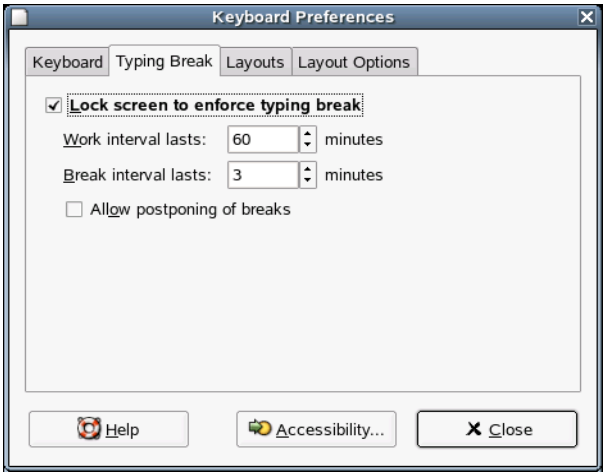
Select an option from the list of available layout options and click *Add* to add the option or *Remove* to remove it.

Click the *Accessibility* button to start the Keyboard accessibility preference tool.

Configuring Typing Break Preferences

Use the Typing Break tabbed page to set typing break preferences.

Figure 2.5 *Keyboard Preferences Dialog—Typing Break Page*



You can modify any of the following typing break preferences:

Table 2.2 *Typing Break Preferences*

Option	Description
Lock Screen to Enforce Typing Break	Locks the screen when you are due a typing break.
Work Interval Lasts	Lets you specify how long you can work before a typing break occurs.
Break Interval Lasts	Lets you specify the length of your typing breaks.
Allow Postponing of Breaks	Lets you postpone typing breaks.

Click the *Accessibility* button to start the Keyboard accessibility preference tool.

2.1.5 Configuring a Modem

If you connect to a network over a modem, use this option to configure your modem. The modem is configured in YaST.

NOTE

Root privileges are required for configuring your modem.

1. Click *Computer* → *Control Center* → *Hardware* → *Modem*.
2. Enter the root password.

   YaST opens.
3. Follow the instructions in YaST to configure the modem.

2.1.6 Configuring the Mouse

Use the Mouse Preference tool to configure your mouse for right-hand use or for left-hand use. You can also specify the speed and sensitivity of mouse movement.

Click *Computer* → *Control Panel* → *Hardware* → *Mouse*.

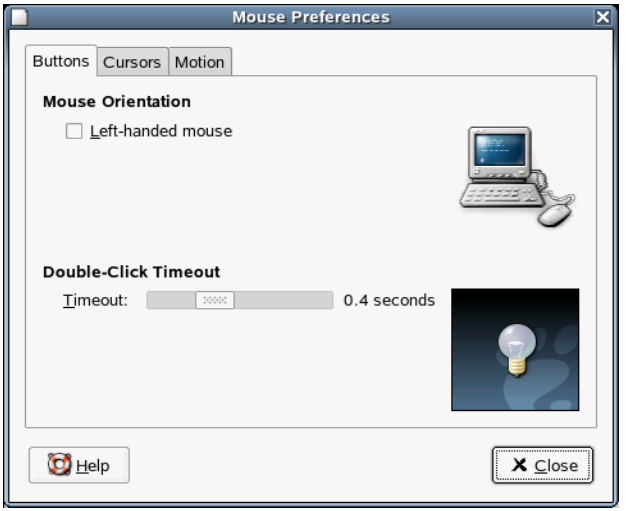
You can customize the settings for the Mouse Preference tool in the following areas:

- Buttons
- Cursors
- Motion

Configuring Button Preferences

Use the Buttons tabbed page to specify whether the mouse buttons are configured for left-hand use. You can also specify the delay between clicks for a double-click.

Figure 2.6 *Mouse Preferences Dialog—Buttons Page*



The following table lists the mouse button preferences you can modify.

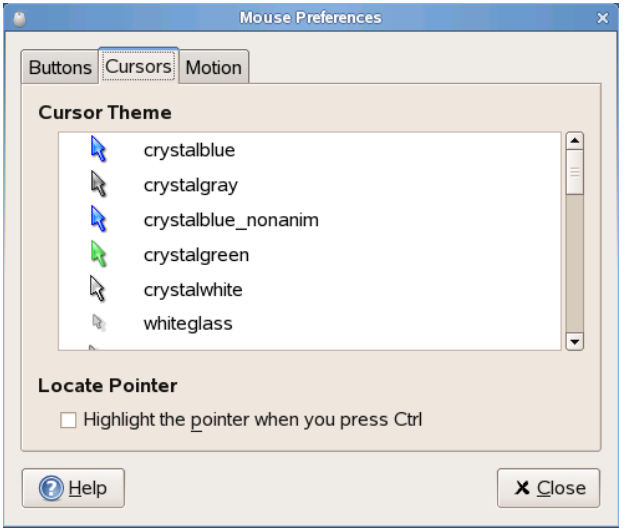
Table 2.3 *Mouse Button Preferences*

Option	Description
Left-handed Mouse	Configures your mouse for left-hand use, swapping the functions of the left mouse button.
Timeout	Use the slider to specify the amount of time that can pass between clicks when you double-click. If the interval between the first and second clicks exceeds the time that is specified here, the action is not interpreted as a double-click.

Configuring Pointer Preferences

Use the Cursors tabbed page to set your mouse pointer preferences.

Figure 2.7 *Mouse Preferences Dialog—Pointers Page*



The following table lists the mouse pointer preferences you can modify.

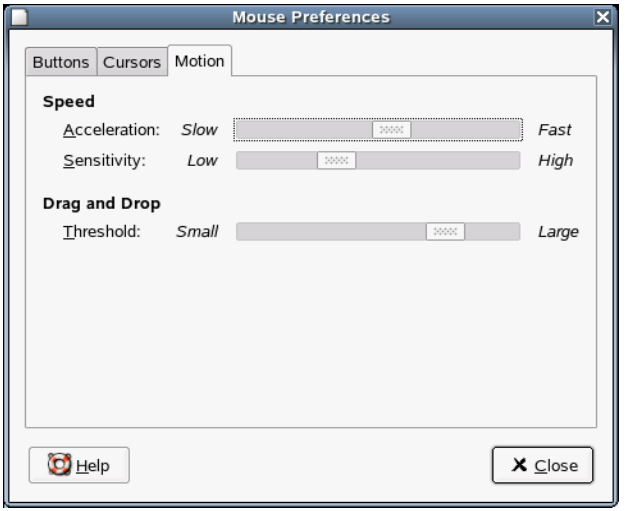
Table 2.4 *Mouse Pointer Preferences*

Option	Description
Cursor Theme	Displays the available cursor themes.
Highlight the Pointer When You Press Ctrl	Enables a mouse pointer animation when you press and release Ctrl. This feature can help you locate the mouse pointer.

Configuring Motion Preferences

Use the Motion tabbed page to set your preferences for mouse movement.

Figure 2.8 *Mouse Preferences Dialog—Motion Page*



The following table lists the mouse motion preferences you can modify.

Table 2.5 *Mouse Motion Preferences*

Option	Description
Acceleration	Use the slider to specify the speed at which your mouse pointer moves on your screen when you move your mouse.
Sensitivity	Use the slider to specify how sensitive your mouse pointer is to movements of your mouse.
Threshold	Use the slider to specify the distance that you must move an item before the move action is interpreted as a drag and drop action.

2.1.7 Configuring a Network Card

If you connect to a network over a network card, use this option to configure your connection. The network card is configured in YaST.

NOTE

Root privileges are required for configuring your network card.

1. Click *Computer* → *Control Center* → *Hardware* → *Network Card*.
2. Enter the root password.

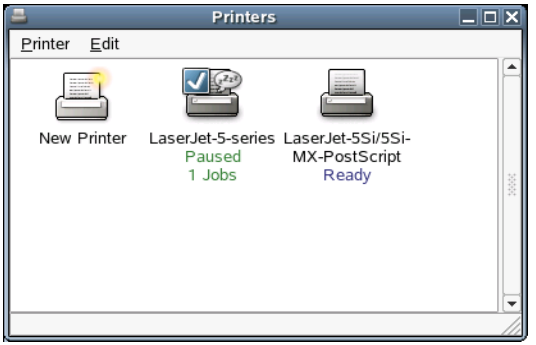
   YaST opens.
3. Follow the instructions in YaST to configure the network card.

2.1.8 Installing and Configuring Printers

Use the Printers module to install and configure printers.

To start the Printers module, click *Computer* → *Control Center* → *Hardware* → *Printers*.

Figure 2.9 *Printers Dialog*



2.1.9 Configuring Removable Drives and Media

You can use a wide variety of removable drives and media, including storage devices, cameras, scanners, and more. The configurations for many of these devices are set up

automatically during installation. To change the configuration for a drive or other removable device, click *Computer → Control Center → Hardware → Removable Drives and Media*.

Some of the possible configuration settings include:

- What happens when a blank CD is inserted in the CD drive
- What happens when an audio CD is inserted in the drive
- Whether images are automatically imported from a digital camera when it is attached to the computer
- Whether removable storage devices are mounted when they are plugged in to the computer
- Whether PDAs are automatically synced when attached to the computer

In general, you do not need to change the settings that are already configured unless you want to change the behavior when a device is connected or if you want to connect a new device that is not yet configured. If you attach a device for the first time and it behaves in an unexpected or undesired way, check the Removable Drives and Media settings.

2.1.10 Configuring a Scanner

The Scanner configuration enables you to attach and configure a scanner, or to remove an already-attached scanner.

NOTE

Scanner configuration is done in YaST2 and requires root privileges.

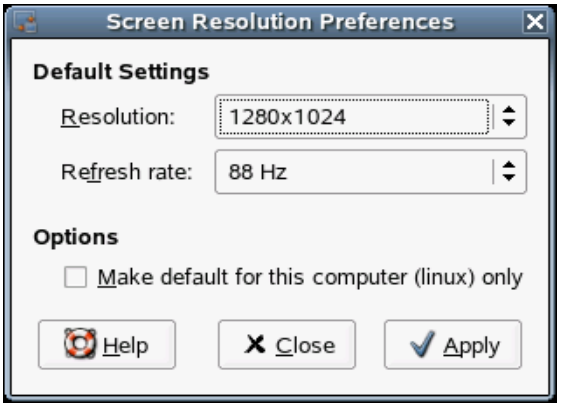
To open YaST2 and configure a scanner, click *Computer → Control Center → Hardware → Scanner*. Refer to the instructions on the *Scanner Configuration* screen for information about the available options.

2.1.11 Specifying Screen Resolution Settings

Use this module to specify the resolution settings for your screen, including Resolution and Refresh Rate.

Click *Computer* → *Control Center* → *Hardware* → *Screen Resolution*.

Figure 2.10 *Screen Resolution Preferences Dialog*



The following table lists the screen resolution preferences you can modify.

Table 2.6 *Screen Resolution Preferences*

Option	Description
Resolution	Select the resolution (in pixels) to use for the screen.
Refresh Rate	Select the refresh rate to use for the screen.
Rotation	Select the rotation mode for your screen if you use a nonstandard monitor.
Make Default for This Computer Only	Makes the screen resolution settings the default settings only for the computer that you are logged in to.

If you cannot find a setting you want, you might need to use the Administrator Settings to reconfigure your graphics card and monitor settings. See Configuring the Graphics Card and Monitor [http://www.novell.com/documentation/nld/nld_deployment/data/bsj9mwg.html#bsmqn45] in the *Deployment Guide* for more information.

2.2 Look and Feel

Look and Feel settings include the following:

- Section 2.2.1, “Changing the Desktop Background” (page 50)
- Section 2.2.2, “Configuring Desktop Effects” (page 53)
- Section 2.2.3, “Configuring Fonts” (page 65)
- Section 2.2.4, “Configuring Menus and Toolbars” (page 67)
- Section 2.2.5, “Configuring the Screen Saver” (page 69)
- Section 2.2.6, “Choosing a Theme” (page 70)
- Section 2.2.7, “Customizing Window Behavior” (page 73)

2.2.1 Changing the Desktop Background

The desktop background is the image or color that is applied to your desktop. You can customize the desktop background in the following ways:

- Select an image for the desktop background. The image is superimposed on the desktop background color. The desktop background color is visible if you select a transparent image or if the image does not cover the entire desktop.
- Select a color for the desktop background. You can select a solid color or create a gradient effect with two colors. A gradient effect is a visual effect where one color blends gradually into another color.

To change the desktop preferences:

1. Click *Computer → Control Center → Look and Feel → Desktop Background*.
2. Set the desktop preferences the way that you want them.

   The following settings can be changed:

Table 2.7 *Background Preferences*

Option	Description
Desktop Wallpaper	Displays an image of your choice on the desktop.
Style	Determines what processing steps should be applied to the selected image to adapt it optimally to the current screen resolution. To specify how to display the image, select one of the following options from the *Style* drop-down list: • **Centered:** Displays the image in the middle of the desktop. • **Fill Screen:** Enlarges the image to cover the desktop and maintains the relative dimensions of the image. • **Scaled:** Enlarges the image until the image meets the screen edges and maintains the relative dimensions of the image. • **Tiled:** Repeats the image over the entire screen.
Add Wallpaper	Opens a dialog where you can select an image file to use as the background picture.
Remove	Removes a Desktop Wallpaper after you select it and then click *Remove*.

Option	Description
Desktop Colors	Lets you specify a color scheme using the options in the *Desktop Color* drop-down list and the color selector buttons. You can specify a color scheme using any of the following options: • *Solid Color* specifies a single color for the desktop background. To select a color, click *Color*. In the Pick a Color dialog, select a color and then click *OK* • *Horizontal Gradient* creates a gradient effect from the left screen edge to the right screen edge. Click *Left Color* to display the Pick a Color dialog, then select the color that you want to appear at the left edge. Click *Right Color*, then select the color that you want to appear at the right edge. • *Vertical Gradient* creates a gradient effect from the top screen edge to the bottom screen edge. Click *Top Color* to display the Pick a Color dialog, then select the color that you want to appear at the top edge. Click *Bottom Color*, then select the color that you want to appear at the bottom edge.

3 When you are satisfied with your choices, click Close.

Your desktop immediately changes to show the new settings.

2.2.2 Configuring Desktop Effects

Xgl is a new Xserver architecture that lets you turn your desktop into a rotating 3-D cube, tile windows so they don't overlap, and switch tasks while viewing live thumbnails. You can enable translucent or transparent windows, zoom in and out of the desktop screen, and perform other window effects such as shadows, fading, and transformations. You can also configure windows to snap to other windows and screen edges when they are moved.

Figure 2.11 *3-D Desktop*

Enabling Desktop Effects

To enable Xgl, you need a graphics adapter capable of providing 3-D support and the graphics driver that Linux uses to operate the graphics adapter. This driver must be able to handle OpenGL (or 3-D) requests from the Linux kernel. For a list of supported adapters, see the `/etc/X11/xgl-hardware-list` file that is included with the openSUSE installation. This file will tell you which graphics cards are known to work

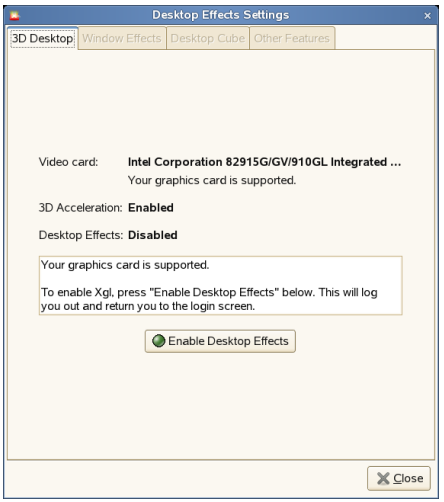
with Xgl, which cards do not work with Xgl, and which cards might work with Xgl but are not supported (because they are either too slow or contain too many known defects).

Your screen resolution must be within the 1024x768 to 1920x2000 range, and your color depth must be set at 24-bit. 3-D acceleration must also be enabled. Use SaX2 to change your graphic card and monitor properties if necessary.

1. Click *Computer* → *Control Center*.

2. Click *Desktop Effects* in the *Look and Feel* group.

   The Desktop Effects tool analyzes your system and tries to determine whether or not you can run Xgl. If it finds anything wrong, it will advise you on what actions you can take. For example, you might be advised to change your screen resolution or color depth, or to activate 3-D acceleration. Follow the onscreen prompts to configure your system for Xgl.


Desktop Effects Settings
3D Desktop
Window Effects
Desktop Cube
Other Features
Video card:
Intel Corporation 82915G/GV/910GL Integrated ...
Your graphics card is supported.
3D Acceleration: Enabled
Desktop Effects: Disabled
Your graphics card is supported.
To enable Xgl, press "Enable Desktop Effects" below. This will log you out and return you to the login screen.
Enable Desktop Effects
Close

3. Click *Enable Desktop Effects*.

4. Type the root password, then click *Continue*.

5. Click *OK* to log out of your session, then type your username and password to log back in.

The default desktop effects are now enabled. For example, windows "wobble" when they first appear and when you move them, widows fade away when you close them, and dragging a window to the far right of the screen rotates the desktop cube. To change any of these effects, see Section "Modifying Desktop Effects" (page 55).

You can also enable Xgl by running the following command as root:

```
gnome-xgl-switch --enable-xgl
```

To disable Xgl, click *Disable Desktop Effects* in the Desktop Effects Settings dialog box, or run the following command as root:

```
gnome-xgl-switch --disable-xgl
```

Modifying Desktop Effects

Use the Desktop Effects Settings tool to enable or disable specific desktop effects, or to change the keystrokes or mouse actions used to control those effects.

1. Click *Computer* → *Control Center*.
2. Click *Desktop Effects* in the *Look and Feel* group.
3. Choose from the following options:
   - Section "Window Effects" (page 56)
   - Section "Desktop Cube" (page 57)
   - Section "Other Features" (page 59)
4. Click *Close*.

You can also use gconf-editor to change Xgl settings.

1. Click *Computer* → *More Applications* → *System* → *GNOME Configuration Editor* or press Alt+F2 and enter `gconf-editor`.

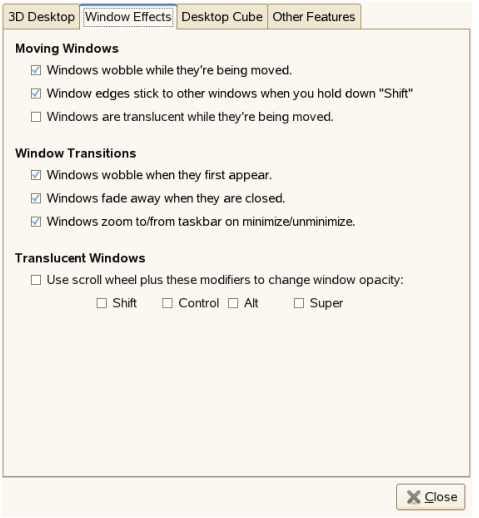
2 Navigate to the `apps/compiz/general` and `apps/compiz/plugins` registry folders and make the changes you want.

3 Click *File* → *Quit* to close the Configuration Editor.

Window Effects

Use the options on this tabbed page to specify what happens when you move windows, how window transitions appear, and to change window opacity.

Figure 2.12 *Window Effects Tabbed Page*



Moving Windows

By default, windows appear distorted (wobbly) as you moved or resize them, giving the impression that the window is more fluid than rigid. If you want window edges to stick (snap) to other windows and workspace edges when you hold down the Shift key while moving the window, both the *Windows wobble while they're being moved* and *Window edges stick to other windows when you hold down "Shift"* options must be selected.

You can also choose to make windows transparent when you move them.

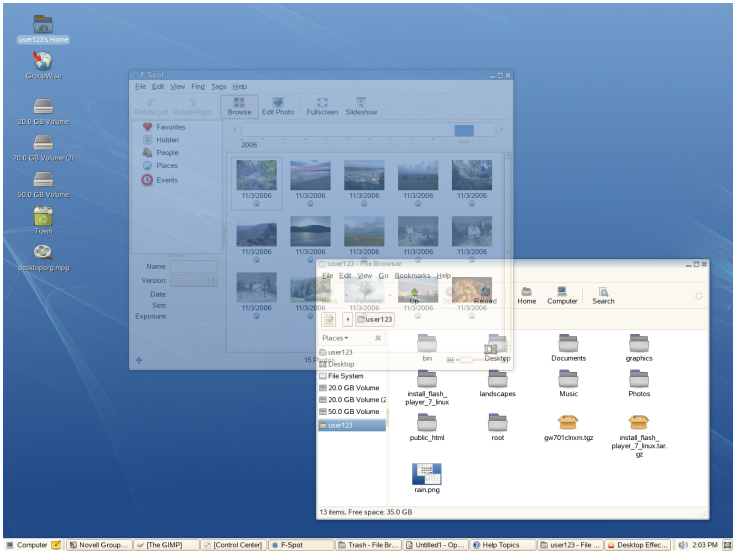
Window Transitions

These options lets you add a fade-in and fade-out effect to windows and menus when you open and close them. Windows will also shrink smoothly onto the task bar when they are minimized and will grow smoothly back to their normal size when they are reopened.

Translucent Windows

This options lets you use the scroll wheel to change how transparent a window appears onscreen. Select *Use scroll wheel plus these modifiers to change window opacity*, then select the button or combination of buttons you want to use. Select a window, hold down the button or buttons you selected, then scroll the mouse wheel up or down to change the transparency of the window.

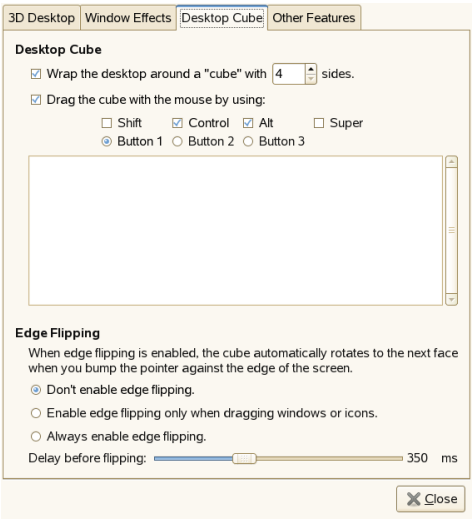
Figure 2.13 *Translucent Window*



Desktop Cube

Use the options on this tabbed page to specify how many sides your desktop cube has, which keystroke and mouse button combination you can use to drag the cube, and to configure edge flipping.

Figure 2.14 *Desktop Cube Tabbed Page*



Desktop Cube

By default, this option gives you four desktops on the faces of a virtual cube that you can rotate to access another desktop. This provides extra space in which to arrange open applications and windows. For example, you can put an editor on one desktop, some shells on another, and your e-mail application and Web browser on the third desktop. Using Ctrl+Alt+Left arrow and Ctrl+Alt+Right arrow, you can rotate the cube to access the programs running in the selected desktop and avoid windows piled on top of each other on one desktop.

Dragging a window to the edge of the screen will rotate the cube and place the window on the new desktop. To rotate the cube manually in 3-D, press Ctrl+Alt, left-click the desktop, then drag the mouse pointer. Ctrl+Alt+Shift+Left or Right arrow lets you rotate the cube while taking the currently selected window with you.

Use the options under *Drag the cube with the mouse by using* to change the default keystrokes used to rotate the cube.

For information on how to add an image behind your cube, see Section “Displaying a Skydome Image Behind the Cube ” (page 64).

Edge Flipping

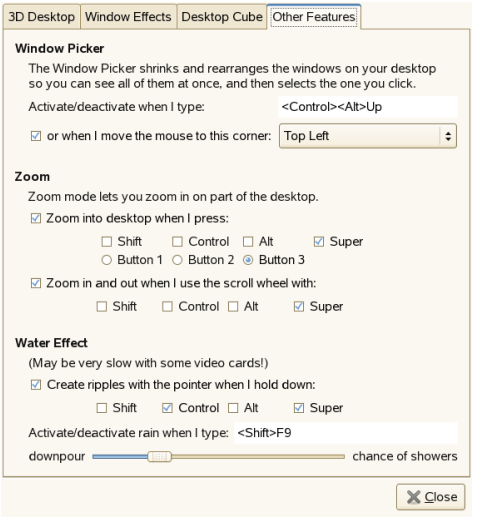
If edge flipping is enabled, the desktop cube rotates to the next face when you bump the mouse pointer to the edge of the screen. You can choose to always enable edge flipping or to enable edge flipping only when you drag a window or icon to the edge of the desktop.

Use the slider bar at the bottom of the tabbed window to specify how long (in microseconds) it takes to rotate the cube after you bump the edge of the desktop with a window or the mouse pointer.

Other Features

Use the options on this tabbed page to configure window tiling, zooming, and water effects.

Figure 2.15 *Other Features Tabbed Page*



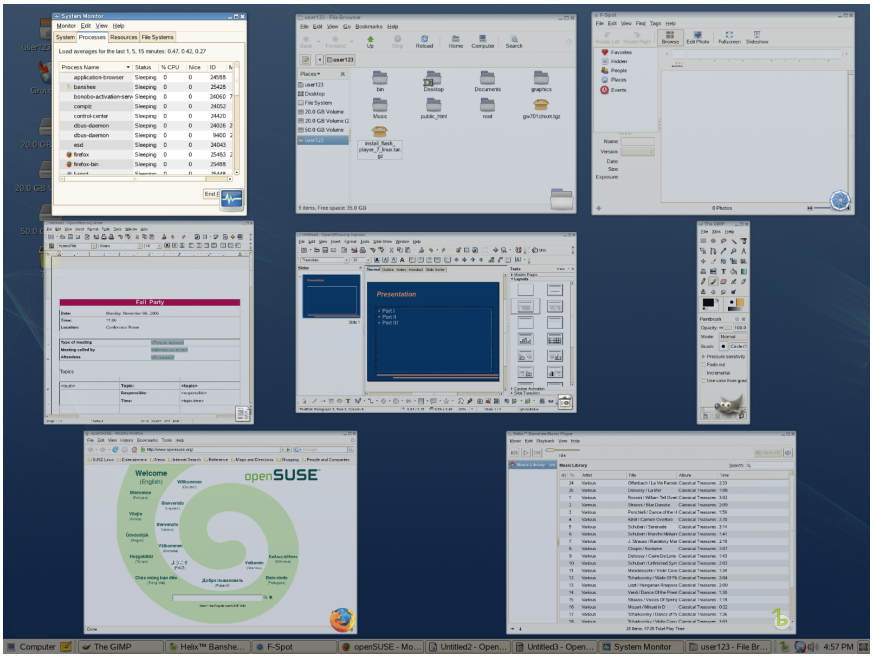
Window Picker

This option lets you tile (or scale) the windows on your desktop so that you can see what windows you have open and select a specific one. This also provides you with a snapshot of all applications open on your desktop. Pressing Ctrl+Alt+Up arrow shrinks all windows and rearranges them on the screen so that they do not overlap. Selecting a window with the mouse causes all windows to return to their original size and position, with the selected window on top.

To change the keystrokes used to tile windows, click the box to the right of *Activate/deactivate when I type* until *New accelerator* appears. Then press the keystrokes you want to use. These new keystrokes will appear in the box.

You can also choose to tile windows by moving the mouse pointer to the top left (default), top right, bottom left, or bottom right of the screen.

Figure 2.16 *Application Tiling*



Zoom

These options give you the ability to zoom in and out of areas on your screen, which significantly improves desktop accessibility to visually impaired users or to anyone who wants to see a part of the screen displayed in a larger size.

By default, pressing the Super key (the Windows key)+Button 3 (if you have a two button mouse, press the left and right buttons simultaneously) zooms in on part to the desktop. You can move the mouse while holding those buttons down to see other parts of the screen. You can also press the Super key and use the scroll wheel on the mouse to manually zoom in and out of the desktop.

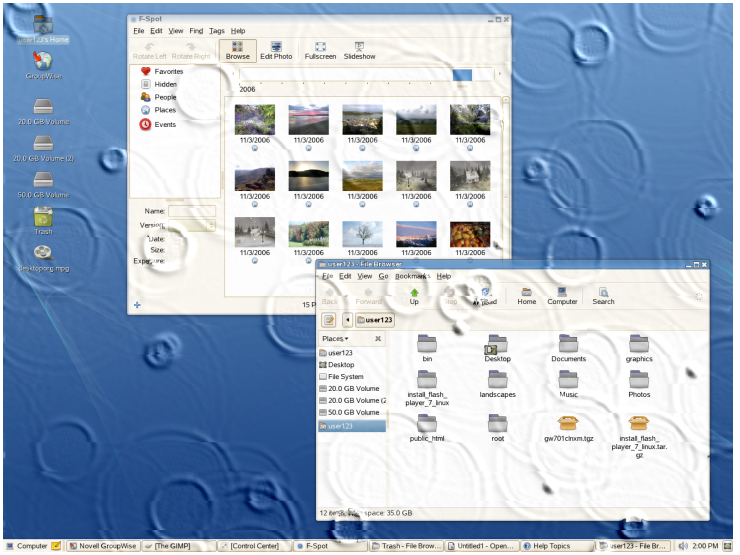
You can choose to deactivate any of these options, or to change the zoom keystrokes.

Water Effect

This option creates a ripple effect on your screen when you hold down the specified key or key combination (Ctrl+Super by default) and move the mouse pointer. You can also enable or disable a rain effect when you press Shift+F9. To change the keystrokes used to enable and disable the rain effect, click the box to the right of *Activate/deactivate rain when I type* until *New accelerator* appears. Then press the keystrokes you want to use. These new keystrokes will appear in the box.

Use the slider bar at the bottom of the tabbed window to specify the intensity of the rain effect.

Figure 2.17 *Water Effect*



Xgl Shortcuts

The following table contains a list of the default keystrokes and mouse movements you can use to perform desktop effects. To change any of these shortcuts, see Section “Modifying Desktop Effects” (page 55).

Table 2.8 *Desktop Effects Shortcuts*

Effect	Shortcut
Activate or deactivate rain effect	Shift+F9
Create ripples with mouse pointer	Ctrl+Super key (Windows key) and move mouse pointer
Panoramic view of all desktop cubes	Ctrl+Alt+Down arrow (use the Left and Right arrows to scroll)
Rotate desktop cube	Ctrl+Alt+Left or Right arrow or drag a window to the edge of the screen
Rotate desktop cube manually	Ctrl+Alt+left-click desktop and drag
Rotate desktop cube while keeping the current active window with you	Ctrl+Alt+Shift+Left or Right arrow
Switch windows (thumbnail view)	Alt+Tab
Tile windows	Ctrl+Alt+Up arrow or move mouse pointer to the top left corner of the screen
Wobbly window	Left-click window and drag
Zoom once	Super key (Windows key)+Button 3
Zoom in manually	Super key (Windows key)+scroll mouse up
Zoom out manually	Super key (Windows key)+scroll mouse down

More Desktop Effects

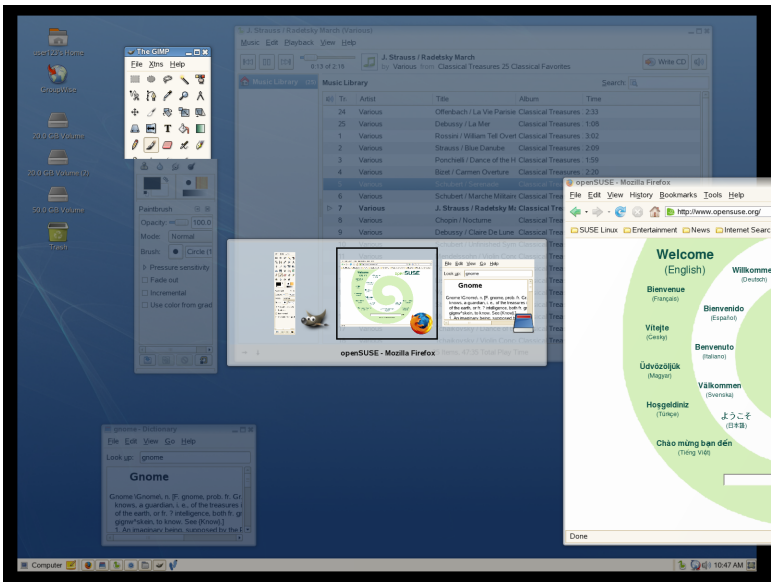
Here are some other things you can do with Xgl:

- Section “Switching Tasks” (page 63)
- Section “Unfolding the Cube ” (page 63)
- Section “Displaying a Skydome Image Behind the Cube ” (page 64)

Switching Tasks

Press Alt+Tab to display a thumbnail view of all windows open on your desktop. While holding the the Alt key down, press Tab to cycle through the list of windows. The currently highlighted window will appear in focus. Release the keys to access that window.

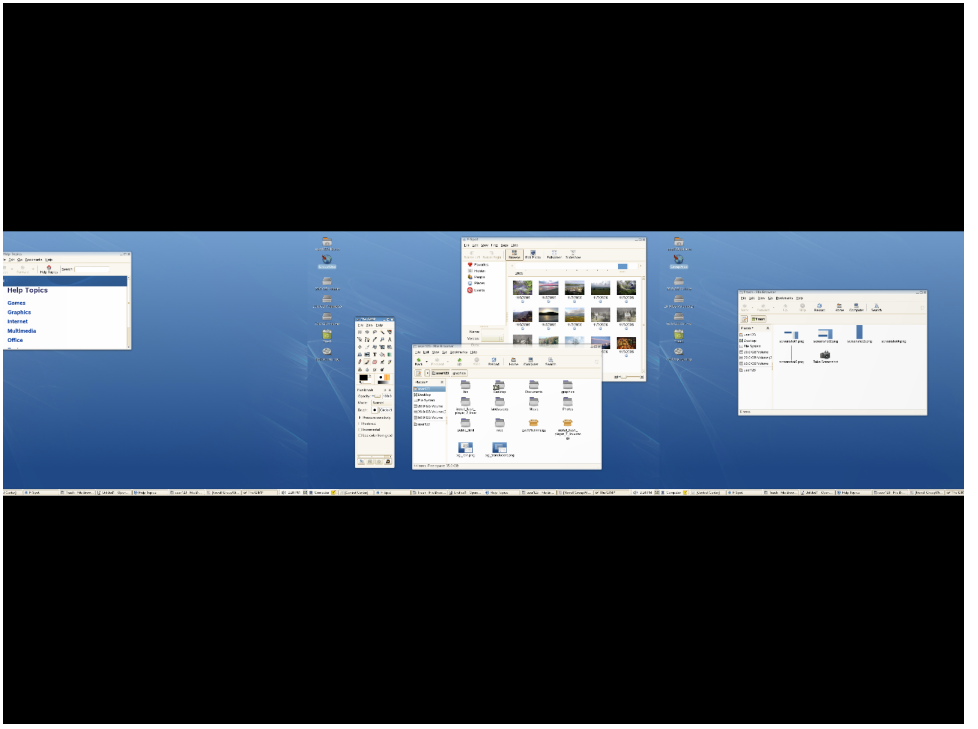
Figure 2.18 *Thumbnail View*



Unfolding the Cube

Press Ctrl+Alt+Down arrow to unfold the desktop cube, opening a panoramic view of all your desktops. Your desktop cube is laid out like a film strip on your screen, and you can use the Left and Right arrows to select a different screen. This is similar to the switcher feature (Alt+Tab), but lets you view a thumbnail of your entire desktop instead of only your active windows.

Figure 2.19 *Panoramic View of All Desktop Cubes*



Displaying a Skydome Image Behind the Cube

You can add background wallpaper (also known as a skydome image) that is visible when you rotate or unfold the desktop cube.

1. Click *Computer* → *More Applications* → *System* → *GNOME Configuration Editor* or press Alt+F2 and enter `gconf-editor`.

2. Navigate to the `apps/compiz/plugins/cube/screen0/options` registry folder.

3. Scroll down the list on the right side of the Configuration Editor and select *skydome*.

4. Double-click *skydome_image* and specify the path to the skydome image you want to display behind the cube.

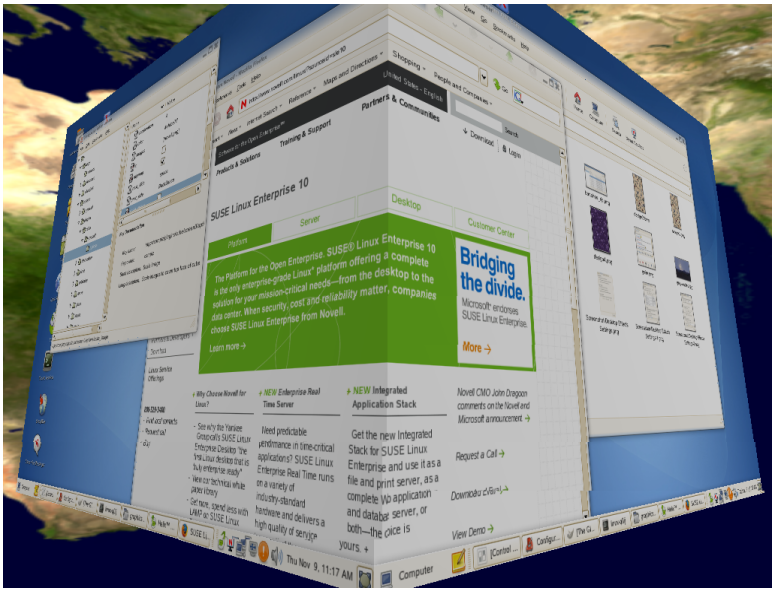
Skydome images must be in `.png` format. The suggested image sizes for skydome images are 1024 x 1024, 1024 x 2048, 1024 x 4096, 2048 x 1024, 2048 x 2048, 2048 x 4096, 4096 x 1024, 4096 x 2048, and 4096 x 4096.

5 (Optional) Select *skydome_animated* to make it look like you are moving around the cube when you use your mouse to rotate the cube.

6 Click *OK*.

7 Click *File* → *Quit* to close the Configuration Editor.

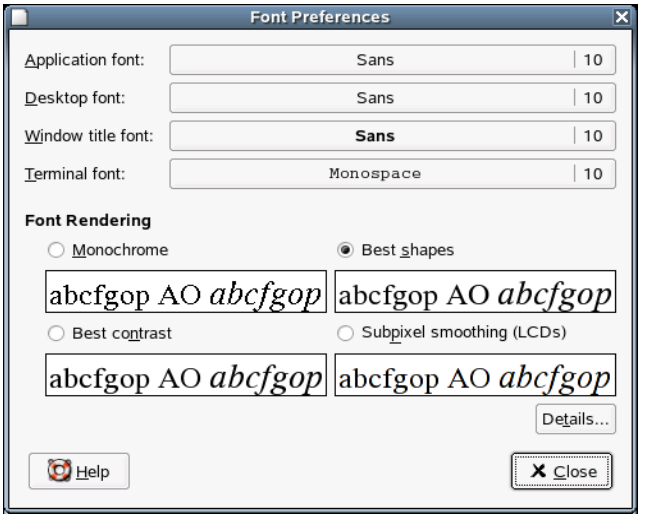
Figure 2.20 *Skydome Image*



2.2.3 Configuring Fonts

Use the Font Preferences dialog to select the fonts to use in your applications, windows, terminals, and desktop. To open the Font Preferences dialog, click *Computer* → *Control Center* → *Look and Feel* → *Fonts*.

Figure 2.21 *Font Preferences Dialog*



The upper part of the dialog shows the fonts selected for applications, documents, the desktop, window titles, and a fixed-width font for terminals. Click one of the buttons to open a selection dialog where you can set the font family, style, and size.

To specify how to render fonts on your screen, select one of the following options:

- **Monochrome:** Renders fonts in black and white only. The edges of characters might appear jagged in some cases because the characters are not antialiased. *Antialiasing* is an effect that is applied to the edges of characters to make the characters look smoother.

- **Best Shapes:** Antialiases fonts where possible. Use this option for standard Cathode Ray Tube (CRT) monitors.

- **Best Contrast:** Adjusts fonts to give the sharpest possible contrast and antialiases fonts so that characters have smooth edges. This option might enhance the accessibility of the GNOME Desktop to users with visual impairments.

- **Subpixel Smoothing (LCDs):** Uses techniques that exploit the shape of individual Liquid Crystal Display (LCD) pixels to render fonts smoothly. Use this option for LCD or flat-screen displays.

Click *Details* to specify further details of how to render fonts on your screen:

- **Resolution (Dots Per Inch):** Use the spin box to specify the resolution to use when your screen renders fonts.
- **Smoothing:** Select one of the options to specify how to antialias fonts.
- **Hinting:** Select one of the options to specify how to apply hinting to improves the quality of fonts at small sizes and at low screen resolutions.
- **Subpixel Order:** Select one of the options to specify the subpixel color order for your fonts. Use this option for LCD or flat-screen displays.

2.2.4 Configuring Menus and Toolbars

You can configure the appearance and behavior of menus and toolbars. Click *Computer → Control Center → Look and Feel → Menus & Toolbars*.

Showing Icons in Menus

If you want icons to appear in menus, select *Show icons in menus*. Not all menu items have icons.

Defining New Keyboard Shortcuts

If you want to be able to define new keyboard shortcuts for menu items, select *Enable menu accelerators*. When this option is enabled, you can change an application shortcut key by placing the mouse pointer over the menu item you want to change, then pressing the new key combination. To remove a shortcut key combination, place the mouse pointer over the menu item, then press <— or Del.

IMPORTANT

If you assign a new keyboard combination, you are not warned if you select a combination that was previously assigned to something else. The previous assignment is removed and replaced by the new one. There is no automatic way to restore the original, default keyboard shortcut for a command. You must manually reassign the keyboard shortcut.

This feature does not maintain shortcuts that are normally assigned to all applications, such as Ctrl + C for copy. This might lead to inconsistencies in your GNOME applications.

Making Toolbars Detachable

If you want to be able to move toolbars to other locations on the screen, click *Detachable toolbars*. When this option is enabled, a handle displays on the left side of the toolbars in your applications. To move a toolbar, click and hold on the handle, then drag the toolbar to the new location.

Configuring Placement of Toolbar Button Labels

Select one of the following options to specify how toolbar button labels display in your GNOME-compliant applications:

Text below icons: Displays icon labels below the icons for each button.

Text beside icons: Displays icons on the toolbar, with text beside the most important icons.

Icons only: Displays icons only, without any text labels.

Text only: Displays text labels on each button, without icons.

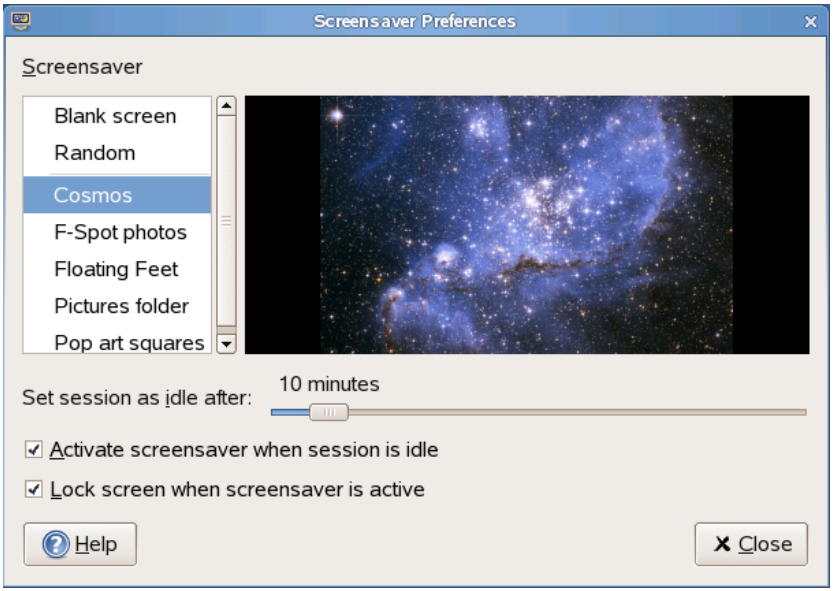
A preview of the selected option appears in the *Menu and Toolbar Preferences* dialog.

2.2.5 Configuring the Screen Saver

A screen saver is a program that blanks the screen or displays graphics when the computer is not used for a specified amount of time. Originally, screen savers protected monitors from having images burned into them. Now they are used primarily for entertainment or security.

To configure a screen saver, click *Computer* → *Control Center* → *Look and Feel* → *Screensaver*.

Figure 2.22 *Screensaver Preferences Dialog*



You can select from *Random* (random selection of screen savers from a custom-defined list), *Blank Screen*, or a selection of installed screen savers.

Select a screen saver from the list to choose it. The currently selected screen saver is displayed in the small preview window. Specify the amount of time that the screen is to be idle before the screen saver is activated, and whether the screen is locked when the screen saver is activated.

2.2.6 Choosing a Theme

A theme is a group of coordinated settings that specifies the visual appearance of a part of the desktop. You can choose themes to change the appearance of the desktop. Use the Theme Preferences tool to select from a list of preinstalled themes. The list of available themes includes several themes for users with accessibility requirements.

To choose a theme, click *Computer → Control Center → Look and Feel → Theme*.

A theme contains settings that affect different parts of the desktop, as follows:

- Controls

  The controls setting for a theme determines the visual appearance of windows, panels, and applets. It also determines the visual appearance of the GNOME-compliant interface items that appear on windows, panels, and applets, such as menus, icons, and buttons. Some of the controls setting options that are available are designed for special accessibility needs. You can select an option for the controls setting in the Controls tabbed page of the Theme Details tool.

- Window frame

  The window frame setting for a theme determines the appearance of the frames around windows only. You can select an option for the window frame setting in the Window Border tabbed page of the Theme Details tool.

- Icon

  The icon setting for a theme determines the appearance of the icons on panels and the desktop background. You can select an option for the icon setting in the Icons tabbed page of the Theme Details tool.

The color settings for the desktop and applications are controlled using themes. You can choose from a variety of preinstalled themes. Selecting a style from the list overview applies it automatically. *Details* opens another dialog where you can customize the style of single desktop elements, like window content, window borders, and icons. Making changes and leaving the dialog by clicking *Close* switches the theme to Custom Theme. Click *Save Theme* to save your modified theme under a custom name. The Internet and other sources provide many additional themes for GNOME as `.tar.gz` files. Install these with the Install theme.

Creating a Custom Theme

The themes that are listed in the Theme Preferences tool are different combinations of controls options, window frame options, and icon options. You can create a custom theme that uses different combinations of options.

1. Click → *Computer* → *Control Center* → *Look and Feel* → *Theme*.
2. Select a theme from the list of themes, then click *Theme Details*.
3. Select the controls option that you want to use in the custom theme from the list in the Controls tabbed page.
4. Click the *Window Border* tab, then select the window frame option that you want to use in the custom theme.
5. Click the *Icons* tab, then select the icons option that you want to use in the custom theme.
6. Click *Close* → *Save Theme*.

   A Save Theme to Disk dialog is displayed.
7. Type a name and a short description for the custom theme in the dialog, then click *Save*.

   The custom theme now appears in your list of available themes.

Installing a New Theme

You can add a theme to the list of available themes. The new theme must be an archive file that is tarred and zipped (a `.tar.gz` file).

1. Click *Computer* → *Control Center* → *Look and Feel* → *Theme*.
2. Click *Install Theme*.
3. Specify the location of the theme archive file in the *Location* field, then click *OK*.

You can also click *Browse* to browse for the file.

4 Click *Install* to install the new theme.

Installing a New Theme Option

You can install new controls options, window frame options, or icons options. You can find many controls options on the Internet.

1 Click *Computer* → *Control Center* → *Look and Feel* → *Theme*.

2 Click *Theme Details*, then click the tab for the type of theme you want to install.

For example, to install an icons option, click the *Icons* tab.

3 Click *Install Theme*.

4 Specify the location of the theme archive file in the *Location* field, then click *OK*.

5 Click *Install* to install the new theme option.

Deleting a Theme Option

You can delete controls options, window frame options, or icons options.

1 Click *Computer* → *Control Center* → *Look and Feel* → *Theme*.

2 Click *Theme Details*, then click the tab for the type of option you want to delete.

3 Click *Go To Theme Folder*.

A File Manager window opens on the default option folder.

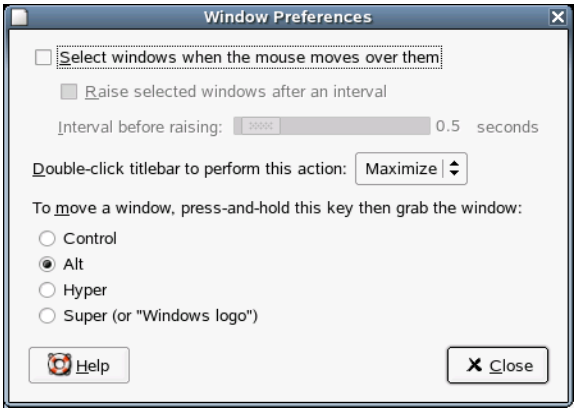
4 Use the File Manager window to delete the option.

2.2.7 Customizing Window Behavior

Use the Window Preferences tool to customize window behavior for the desktop. You can determine how a window reacts to contact with the mouse pointer or to double-clicks on its titlebar, and you can define which key to hold for moving an application window.

To customize window behavior, click *Computer → Control Center → Look and Feel → Windows*.

Figure 2.23 *Window Preferences Dialog*



When several application windows populate the desktop, the active one by default is the one last clicked. Change this behavior by activating *Select Windows When the Mouse Moves over Them*. If desired, activate *Raise Selected Window after an Interval* and adjust the latency time with the slider. This raises a windows a short time after the window receives focus.

Application windows can be shaded (rolled up) by double-clicking the title bar, leaving only the title bar visible. This saves space on the desktop and is the default behavior. It is also possible to set windows to maximize when the title bar is double-clicked.

Using the radio buttons, select a modifier key to press for moving a window (Ctrl, Alt, Hyper, or the Windows logo key).

2.3 Personal

Personal settings include the following:

- Section 2.3.1, “Configuring Keyboard Accessibility Settings” (page 74)
- Section 2.3.2, “Configuring Assistive Technology Support” (page 77)
- Section 2.3.3, “Changing Your Password” (page 78)
- Section 2.3.4, “Managing Keyrings” (page 78)
- Section 2.3.5, “Customizing Keyboard Shortcuts” (page 79)

2.3.1 Configuring Keyboard Accessibility Settings

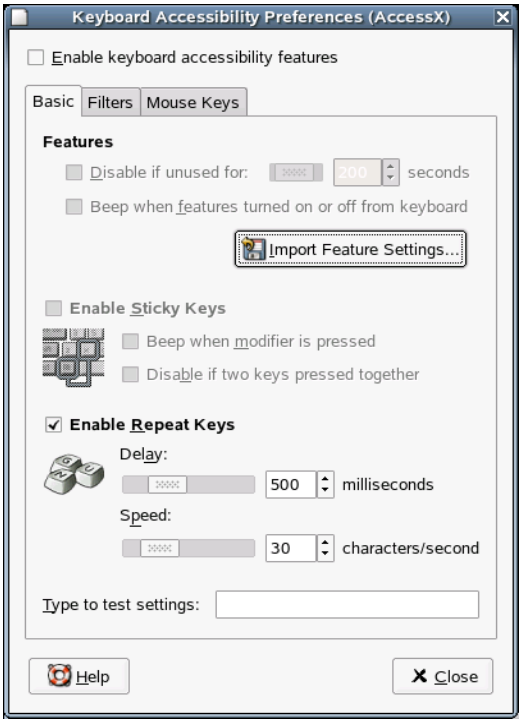
GNOME provides keyboard settings designed to help users with motion impairments use the GNOME desktop. Some of the available settings include:

- How long a key is pressed and held before being recognized as valid input
- Whether the keyboard can be used as a mouse
- Whether key combinations that use Alt, Control, and Shift can be duplicated with “sticky keys”

To configure keyboard accessibility settings, click *Computer* → *Control Center* → *Personal* → *Accessibility*.

The module consists of the three tabs: *Basic*, *Filters*, and *Mouse Keys*. Before modifying settings, activate *Enable Keyboard Accessibility Features*.

Figure 2.24 *Keyboard Accessibility Preferences Dialog*



Features (Basic Tab)

The keyboard accessibility functions can be deactivated automatically after a certain time. Set an appropriate time limit (measured in seconds) with the slider. The system can additionally provide audible feedback when the keyboard accessibility functions are activated and deactivated.

Enable Sticky Keys (Basic Tab)

Some keyboard shortcuts require that one key (a modifier key) is kept pressed constantly (this applies to Alt, Ctrl, and Shift) while the rest of the shortcut is typed. When sticky keys are used, the system regards those keys as staying pressed after being pressed once. For an audible feedback generated each time a modifier key is pressed, activate *Beep* when the modifier is pressed. If *Disable If Two Keys Pressed Together* is selected,

the keys do not “stick” anymore when two keys are pressed simultaneously. The system then assumes that the keyboard shortcut has been completely entered.

Enable Repeat Keys (Basic Tab)

Activate *Repeat Keys* to make settings with sliders for *Delay* and *Speed*. This determines how long a key must be pressed for the automatic keyboard repeat function to be activated and at what speed the characters are then typed.

Test the effect of the settings in the field at the bottom of the dialog. Select parameters that reflect your normal typing habits.

Enable Slow Keys (Filters Tab)

To prevent accidental typing, set a minimum time limit that a key must be pressed and held before it is recognized as valid input by the system. Also determine whether audible feedback should be provided for keypress events, accepted keypresses, and the rejection of a keypress.

Enable Bounce Keys (Filters Tab)

To prevent double typing, set a minimum time limit for accepting two subsequent keypress events of the same key as the input of two individual characters. If desired, activate audible feedback upon rejection of a keypress event.

Toggle Keys (Filters Tab)

You can request audible feedback from the system when a keycap modifier key is pressed.

Mouse Keys Tab

Activates the keyboard mouse; the mouse pointer is controlled with the arrow keys of the number pad. Use the sliders to set the maximum speed of the mouse pointer, the acceleration time until the maximum speed is reached, and the latency between the pressing of a key and the cursor movement.

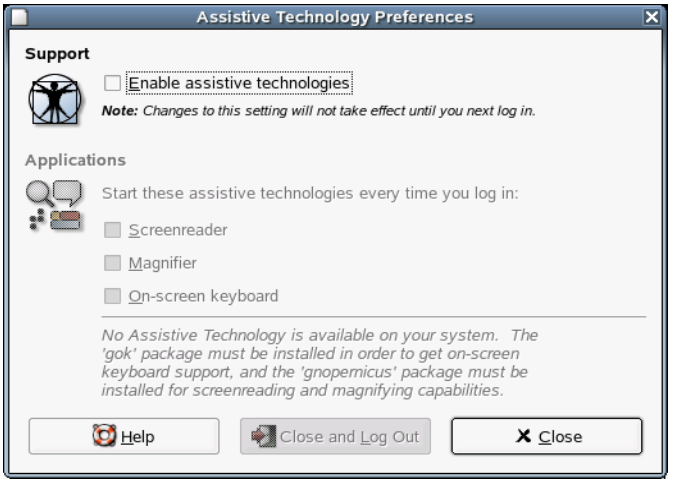
2.3.2 Configuring Assistive Technology Support

Several assistive technologies are included for users with special needs:

- Screen reader
- Screen magnifier
- On-screen keyboard

To configure assistive technology options, click *Computer → Control Center → Personal → Assistive Technology Preferences*. To enable the technologies, first select *Enable Assistive Technologies* and then select the technologies you want to enable every time you log in.

Figure 2.25 *Assistive Technology Preferences Dialog*


Assistive Technology Preferences
Support
Enable assistive technologies
Note: Changes to this setting will not take effect until you next log in.
Applications
Start these assistive technologies every time you log in:
Screenreader
Magnifier
On-screen keyboard
No Assistive Technology is available on your system. The 'gok' package must be installed in order to get on-screen keyboard support, and the 'gnopernicus' package must be installed for screenreading and magnifying capabilities.
Help
Close and Log Out
Close

The gok package must be installed in order to get on-screen keyboard support, and the gnopernicus and gnome-mag packages must be installed in order to get screenreading and magnifying capabilities.

If these packages are not installed on your system (they are installed by default during installation), install them with the following procedure:

1. Click *Computer* → *More Applications* → *System* → *YaST*.
2. Type the root password, then click *OK*.
3. Click *Software* → *Install and Remove Software*.
4. Select *Selection* from the *Filter* drop-down menu, then select *Accessibility* from the *Selection* list.
5. Select gok, gnopernicus, and gnome-mag from the *Package* list
6. Click *Accept*.
7. Insert the CD you are prompted for, then click *OK*.
8. Click *Cancel* → *Close* after the package installation is complete.

2.3.3 Changing Your Password

For security reasons, it is a good idea to change your password from time to time. To change your password:

1. Click *Computer* → *Control Center* → *Personal* → *Change Password*.
2. Type your old (current) password.
3. Type your new password.
4. Confirm your new password by typing it again, then click *OK*.

2.3.4 Managing Keyrings

GNOME Keyring Manager provides an interface for viewing secrets stored in keyrings on your computer. Secrets include such items as:

- Passwords
- Wireless credentials

- Certificates
- Credentials for logging in to another computer

Most users should never use Keyring Manager because secrets are managed by the applications that create them. A few users might find it necessary to use Keyring Manager to delete a secret.

To delete a secret:

1. Open Keyring Manager by clicking *Computer* → *Control Center* → *Personal* → *Keyring Manager*.
2. In the list of keyrings on the left side of Keyring Manager, click *Default*.
3. Click the secret you want to delete in the list in the top right area of Keyring Manager.
4. Click *KeyringDelete Keyring*.

   The secret is removed from the list.

2.3.5 Customizing Keyboard Shortcuts

A keyboard shortcut is a key or combination of keys that provides an alternative to standard ways of performing an action. You can customize the keyboard shortcuts for a number of actions.

To open the Keyboard Shortcuts tool, click *Computer* → *Control Center* → *Personal* → *Shortcuts*.

Figure 2.26 *Keyboard Shortcuts Dialog*

To change the shortcut keys for an action, select the action and then press the keys you want to associate with the action. To disable the shortcut keys for an action, click the shortcut for the action, then press Backspace.

2.4 System

System settings include the following:

- Section 2.4.1, “Configuring Date and Time” (page 81)
- Section 2.4.2, “Configuring Streaming Audio and Video” (page 81)
- Section 2.4.3, “Configuring Language Settings” (page 81)
- Section 2.4.4, “Configuring Network Proxies” (page 82)
- Section 2.4.5, “Configuring Power Management” (page 84)
- Section 2.4.6, “Setting Preferred Applications” (page 89)
- Section 2.4.7, “Configuring Search with Beagle Settings” (page 90)

- Section 2.4.8, “Managing Sessions” (page 90)
- Section 2.4.9, “Setting Sound Preferences” (page 95)
- Section 2.4.10, “Managing Users and Groups” (page 99)
- Section 2.4.11, “Configuring Administrative Settings with YaST” (page 99)

2.4.1 Configuring Date and Time

To change your date and time configuration, for example to change your time zone or the way the date and time are displayed, click *Computer* → *Control Center* → *System* → *Date and Time*. This opens the YaST Date and Time module, which requires root privileges. Enter the root password and follow the instructions on the YaST pages.

2.4.2 Configuring Streaming Audio and Video

The GStreamer Properties application lets you set which audio and video plug-ins you want to use for streaming multimedia. To open this application, click *Computer* → *Control Center* → *System* → *GStreamer Properties*.

In most cases, you should use the default selections. However, if you want to select other plug-ins, select the plug-in you want from the menus. The *Audio* tab lists the plug-ins for audio input and output. The *Video* tab lists the video plug-ins.

Click *Close* when you are finished. The system is immediately configured to use the selected plug-ins.

2.4.3 Configuring Language Settings

openSUSE can be configured to use any of many languages. The language setting determines the language of dialogs and menus, and can also determine the keyboard and clock layout.

You can set the following language settings:

- Primary language
- Whether the keyboard language setting should depend on the primary language
- Whether the time zone should depend on the primary language
- Secondary languages

NOTE

You must have administrator (root) privileges to configure language settings.

To configure your language settings:

1. Click *Computer → Control Center → System → Language*.
2. (Conditional) If you are not logged in as root or a user with administrator privileges, enter the root password.

   If you do not know the root password, contact your system administrator. You cannot continue without the root password.
3. Specify the primary language, whether you want to adapt the keyboard layout or time zone to the primary language, and any secondary languages you need to support on the computer.
4. Click *Accept*.

   The language configuration settings are written to several configuration files. This process can take a few minutes. The new settings take effect immediately after they are written to the configuration files.

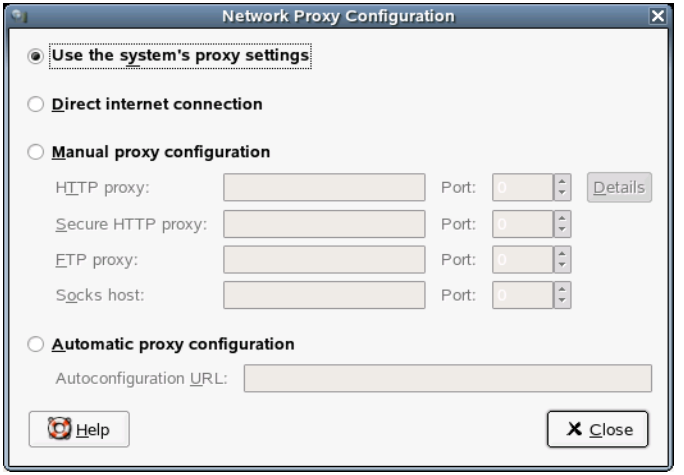
2.4.4 Configuring Network Proxies

The Network Proxy Configuration tool lets you configure how your system connects to the Internet. You can configure the desktop to connect to a proxy server and specify the details of the server. A proxy server is a server that intercepts requests to another server and fulfills the request itself, if it can. You can specify the Domain Name Service (DNS) name or the Internet Protocol (IP) address of the proxy server. A DNS name is

a unique alphabetic identifier for a computer on a network. An IP address is a unique numeric identifier for a computer on a network.

Click *Computer → Control Center → System → Network Proxies*.

Figure 2.27 *Network Proxy Configuration Dialog*



The following table lists the Internet connection options that you can modify.

Table 2.9 *Internet Connection Options*

Option	Description
Direct Internet connection	Connects directly to the Internet, without a proxy server.
Manual proxy configuration	Connects to the Internet through a proxy server and lets you configure the proxy server manually.
HTTP proxy	The DNS name or IP address of the proxy server to use when you request a HTTP service. Specify the port number of the HTTP service on the proxy server in the Port box.

Option	Description
Secure HTTP proxy	The DNS name or IP address of the proxy server to use when you request a Secure HTTP service. Specify the port number of the Secure HTTP service on the proxy server in the Port box.
FTP proxy	The DNS name or IP address of the proxy server to use when you request an FTP service. Specify the port number of the FTP service on the proxy server in the Port box.
Socks host	The DNS name or IP address of the Socks host to use. Specify the port number for the Socks protocol on the proxy server in the Port spin box.
Automatic proxy configuration	Connects to the Internet through a proxy server and lets you configure the proxy server automatically.
Autoconfiguration URL	The URL that contains the information required to configure the proxy server automatically.

2.4.5 Configuring Power Management

The Power Management module lets you manage your system's power-saving options. It is especially useful for extending the life of a laptop's battery charge. However, several options also help to save electricity when you are using a computer that is plugged in to an electricity source.

Click *Computer* → *Control Center* → *System* → *Power Management*.

Specifying Sleep Mode Times

Sleep mode shuts down the computer when it is unused for a specified amount of time. Whether you are using battery or AC power, you can specify the amount of time that the computer remains unused before it is put to sleep.You can also put the computer's display to sleep without shutting down the computer, saving the power required by the display.

Sleep mode is especially important when the computer is operating under battery power. Both the screen and the computer draw power from the battery, so you can save a significant amount of battery power by shutting down one or both. It is common to put the display to sleep after a shorter period of time. Then, if the computer remains unused for an additional amount of time, it is also put to sleep.

To specify your computer's sleep settings:

1. Click *Computer → Control Center → System → Power Management*.

2. Click the tab for the type of power you are using.

   If your computer uses AC power, click *Running on AC*.

   If your computer runs on battery power, click *Running on Battery*.

   If your computer operates on both AC and battery power, you can configure the settings on both tabs. The settings you choose are in effect no matter which power source you use.

3. Use the sliders to set the amount of inactive time that passes before the display and computer go into sleep mode.

   When the display is in sleep mode, the computer continues to run. When the computer is in sleep mode, power to the display and hard disk is shut off and the computer uses only the power needed to maintain the contents of RAM.

4. (Conditional) If the computer is a laptop, set the actions you want taken when the laptop lid is closed.

   The following actions are available:

   Do nothing: The laptop continues to run normally when the lid is closed.

Blank screen: The screen is blanked, reducing power consumption.

Suspend: Suspend mode turns off power-consuming computer components such as the display and the hard drive without saving the contents of RAM. Any unsaved data is lost.

Hibernate: Hibernate mode saves all contents of RAM to the hard disk before shutting off power to the system. When you start the system again, the saved data is put back into RAM, restoring your computer to the state it was in before it shut off. Hibernate requires an amount of free hard disk space equal to the amount of RAM installed on the computer.

5 (Conditional) If you configure how a laptop manages battery power, configure the action you want taken if battery power reaches a critical level.

The available options are:

Do nothing: The computer does not shut down or automatically go into any kind of power-saving mode.

Suspend: Suspend mode turns off power-consuming computer components such as the display and the hard drive without saving the contents of RAM. Any unsaved data is lost.

Hibernate: The computer saves the contents of RAM to the hard disk, then shuts down. When you turn the computer on again, the saved data is put back into RAM, restoring your computer to the state it was in before it shut off. Hibernate requires an amount of free hard disk space equal to the amount of RAM installed on the computer.

Shut down: The computer turns off without saving anything. All unsaved data is lost.

Choose the option you prefer by selecting it from the menu. If you have sufficient free disk space, Hibernate is the best choice.

6 (Optional) If you want power management to prefer power savings over performance, select the check box for that option.

If the check box is selected, the performance of some power-consuming features, such as the display, is reduced slightly to reduce power consumption.

7 Click *Close*.

The options you selected go into effect immediately.

Setting General Power Options

To set general power options, click *Computer* → *Control Center* → *System* → *Power Management*, then click the *General* tab. On this tab, you can choose:

- The sleep type to use when the computer is inactive
- The action to take when the power button is pressed
- How and when the *Power* icon displays

The available options are:

Table 2.10 *General Power Management Options*

Setting	Options
Sleep type when inactive	• Do nothing The computer does not shut down or automatically go into any kind of power-saving mode. • Suspend Suspend mode turns off power-consuming computer components such as the display and the hard drive without saving the contents of RAM. Any unsaved data is lost. • Hibernate The computer saves the contents of RAM to the hard disk, then shuts down. When you turn the computer on again, the saved data is put back into RAM, restoring your computer to the state it was in before it shut off. Hibernate requires an amount of free hard disk

Setting	Options
	space equal to the amount of RAM installed on the computer.
When power button is pressed	• Ask me Displays a prompt asking what action to take. • Suspend Turns off power-consuming components but continues to use enough power to maintain the contents of RAM. • Hibernate Saves the contents of RAM to the hard disk and shuts down. • Shutdown Shuts down the computer without saving the contents of RAM.
Notification area	Determines how the power icon is displayed in the task panel. The options are: • Never display icon • Only display when battery level is critical • Only display when charging or discharging • Only display when battery present • Always display icon

2.4.6 Setting Preferred Applications

The Preferred Applications module allows you to specify which applications to use for various common tasks:

To change any of these settings:

1. Click *Computer* → *Control Center* → *System* → *Preferred Applications*.
2. Click the tab for the type of application you want to set.

   The following list shows the options and default settings.

   - Web browser

     Default: Firefox

   - Mail reader

     Default: Evolution

   - Terminal

     GNOME Terminal

3. Select one of the available from the applications from the *Choose* menu or enter the command used to start the application.
4. Click *Close*.

The changes take effect immediately.

2.4.7 Configuring Search with Beagle Settings

Beagle is the search engine used on the GNOME Desktop. By default, Beagle is configured to start automatically and index your home directory. If you want to change these settings, specify the number of results displayed after a search or change the Beagle privacy settings, click *Computer → Control Center → System → Search Settings*.

2.4.8 Managing Sessions

This module lets you manage your sessions. A session occurs between the time that you log in to the desktop environment and the time that you log out. You can set session preferences and specify which applications to start when you begin a session. You can configure sessions to save the state of applications and then restore the state when you start another session.

You can also use this preference tool to manage multiple sessions. For example, you might have a mobile session which starts applications you use most frequently when traveling, a demo session that starts applications used to present a demonstration or slide show to a customer, and a work session that uses a different set of applications when you are working in the office.

Click *Computer → Control Center → System → Sessions*.

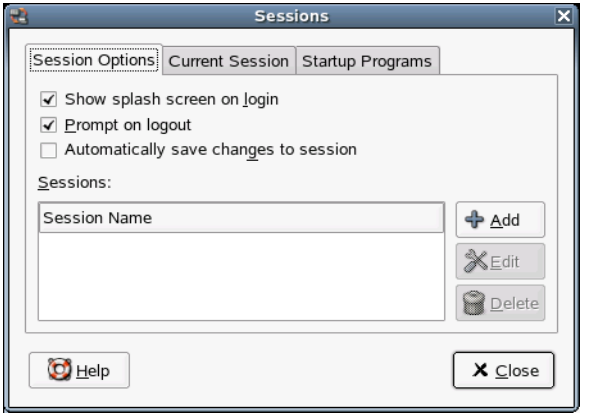
This module consists of three tabbed pages:

- **Session Options:** Lets you manage multiple sessions and set preferences for the current session.
- **Current Session:** Lets you specify startup order values and select restart styles for the session-managed applications in your current session.
- **Startup Programs:** Lets you specify non-session-managed startup applications, which start automatically when you start a session.

Setting Session Preferences

Use the Session Options tabbed page to manage multiple sessions and set preferences for the current session.

Figure 2.28 *Sessions Dialog—Session Options Page*



The following table lists the session options that you can modify.

Table 2.11 *Session Preferences for Current Session*

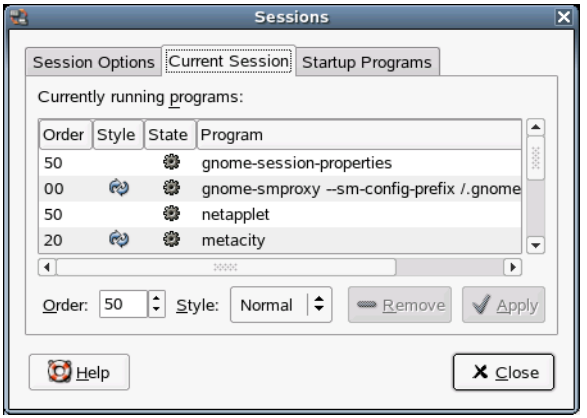
Option	Description
Show Splash Screen on Login	Displays a splash screen when you start a session.
Ask on Logout	Displays a confirmation dialog when you end a session.
Automatically Save Changes to Session	Automatically saves the current state of your session. The session manager saves the session-managed applications that are open and the settings associated with the session-managed applications. The next time you start a session, the applications start automatically with the saved settings.

Option	Description
	If you do not select this option, the Logout Confirmation dialog displays a *Save Current Setup* option when you end your session.
Sessions	Lets you manage multiple sessions in the desktop, as follows: • To create a new session, click *Add*. The Add a New Session dialog is displayed, letting you specify a name for your session. • To change the name of a session, select the session and then click `Edit`. The Edit Session Name dialog is displayed, letting you specify a new name for your session. • To delete a session, select the session and then click *Delete*.

Setting Session Properties

Use the Current Session tabbed page to specify startup order values and to choose restart styles for the session-managed applications in your current session.

Figure 2.29 *Sessions Dialog—Current Session Page*



The following table lists the session properties that you can configure.

Table 2.12 *Session Properties for Session-Managed Applications*

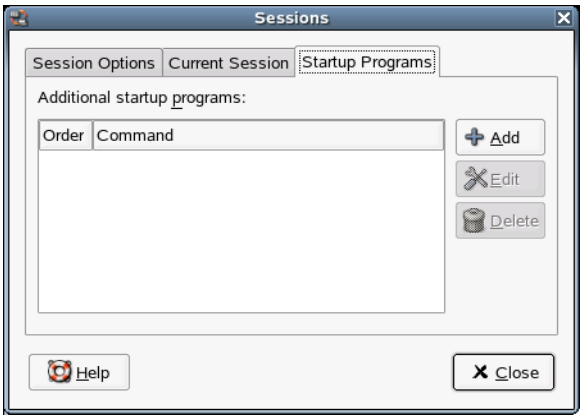
Option	Description
Order	Specifies the order in which the session manager starts session-managed startup applications. The session manager starts applications with lower order values first. The default value is 50. To set the startup order of an application, select the application in the table. Use the *Order* box to specify the startup order value.
Style	Determines the restart style of an application. To select a restart style for an application, select the application in the table and then select one of the following styles: • **Normal:** Starts automatically when you start a session. Use the `kill` command to terminate applications with this restart style during a session. • **Restart:** Restarts automatically when you close or terminate the application. Select this style for an application if it must run continuously during your session. To terminate an application with this restart style, select the application in the table and then click *Remove*.

Option	Description
	• **Trash:** Does not start when you start a session. • **Settings:** Starts automatically when you start a session. Applications with this style usually have a low startup order and store your configuration settings for GNOME and session-managed applications.
Remove	Deletes the selected application from the list. The application is removed from the session manager and closed. Applications that you delete are not started the next time you start a session.
Apply	Applies changes made to the startup order and the restart style.

Configuring Startup Applications

Use the Startup Programs tabbed page to specify non-session-managed startup applications.

Figure 2.30 *Sessions Dialog—Startup Programs Page*



Startup applications are applications that start automatically when you begin a session. You specify the commands that run these applications and the commands execute automatically when you log in.

You can also start session-managed applications automatically. For more information, see Section “Setting Session Preferences” (page 91).

To add a startup application, click *Add*. The Add Startup Program dialog is displayed. Specify the command to start the application in the *Startup Command* field. If you specify more than one startup application, use the *Order* box to specify the startup order of the each application.

To edit a startup application, select the startup application and then click *Edit*. The Edit Startup Program dialog is displayed. Modify the command and the startup order for the startup application.

To delete a startup application, select the startup application and then click *Delete*.

To disable a startup application, select the startup application and then click *Disable*.

2.4.9 Setting Sound Preferences

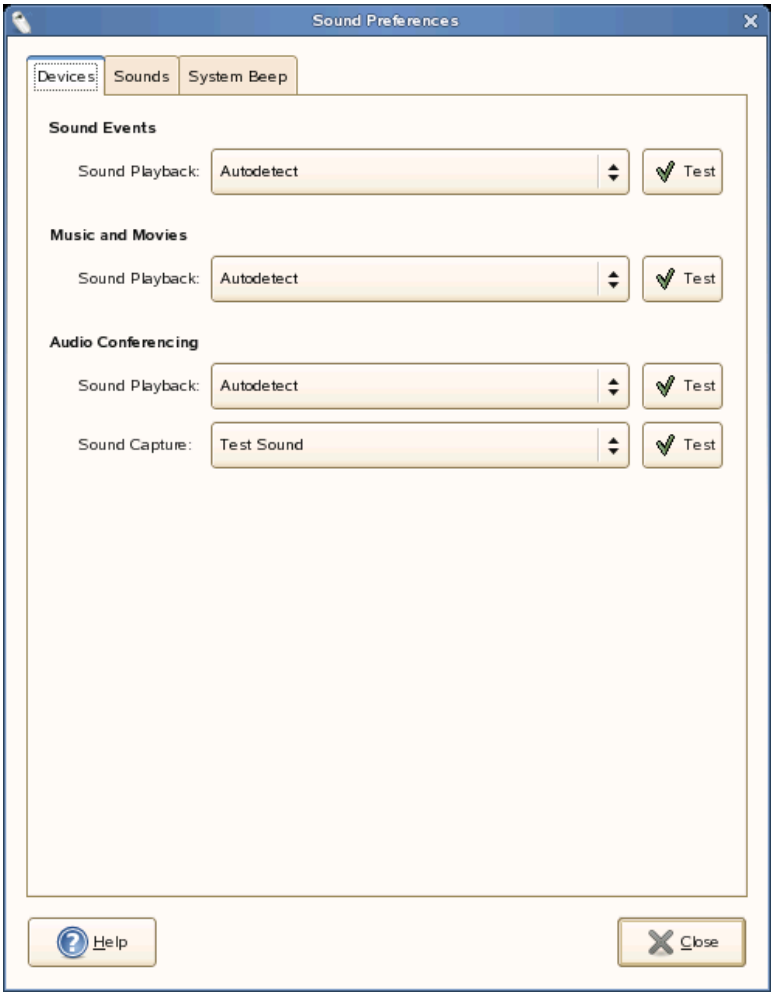
The Sound Preferences tool lets you control when the sound server starts. You can also specify which sounds to play when particular events occur.

Click *Computer* → *Control Center* → *System* → *Sound* to open the Sound Preferences tool.

Setting Sound Devices

Use the *Devices* tab to configure the application to use for various types of sounds.

Figure 2.31 *Sound Preferences Dialog—Devices Page*

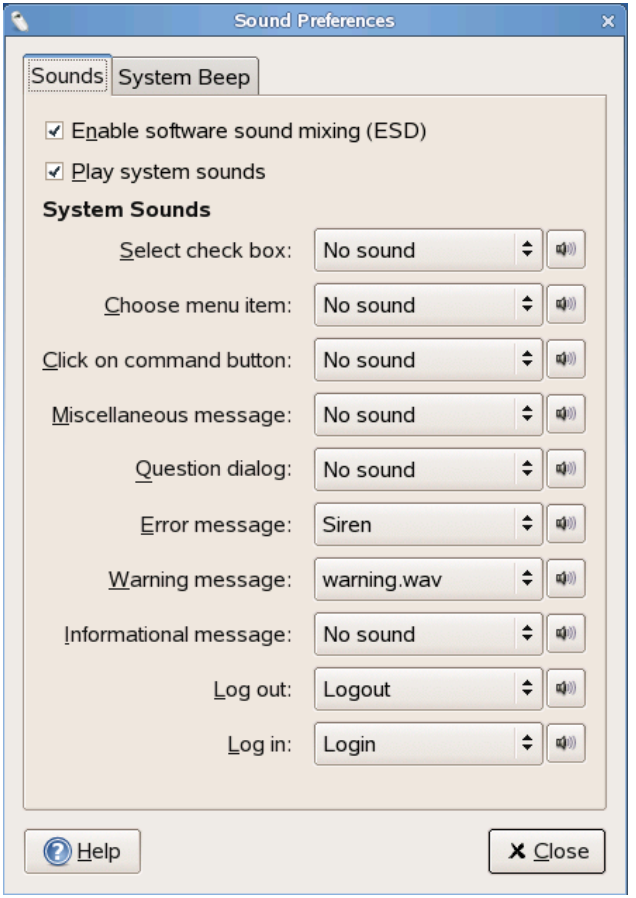


Click the drop-down list for each type of sound and select the application to use. In most cases, *Autodetect* is the best choice, unless you want to use a specific application.

Setting General Sound Preferences

Use the *Sounds* tab to specify when to launch the sound server. You can also enable sound event functions.

Figure 2.32 *Sound Preferences Dialog—General Page*



Click *Enable software sound mixing (ESD)* to start the sound server when you start a session. When the sound server is active, the desktop can play sounds.

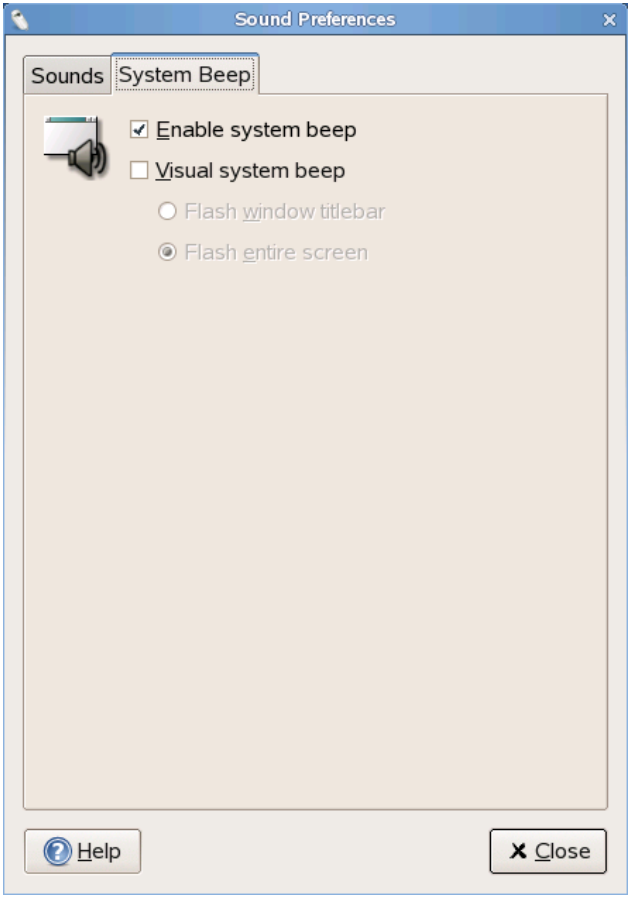
Click *Play system sounds* to play sounds when particular events occur in the desktop.

Finally, select the sound to play at each of the specified events.

Setting System Beep Preferences

Some applications play a beep sound to indicate a keyboard input error. Use the *System Beep* tab to set preferences for the system beep.

Figure 2.33 *Sound Preferences Dialog—System Beep Page*



2.4.10 Managing Users and Groups

Use the *User Management* tool to manage users and groups, including user and group names, group membership, password and password encryption, and other options.

Click *Computer → Control Center → System → User Management*. The *User Management* tool opens the User and Group Administration module in YaST.

NOTE

Root privileges are required to manage users and groups.

Follow the directions in YaST for information on changing settings.

2.4.11 Configuring Administrative Settings with YaST

For your convenience, YaST is available from the Control Panel as well as the Applications menu. For information about using YaST see the *Reference* manual that came with your distribution of openSUSE.

Part II. Office and Collaboration

The OpenOffice.org Office Suite

3

OpenOffice.org is a powerful open-source office suite that provides tools for all types of office tasks, such as writing texts, working with spreadsheets, or creating graphics and presentations. With OpenOffice.org, you can use the same data across different computing platforms. You can also open and edit files in other formats, including Microsoft Office, then save them back to this format, if needed. This chapter covers information about the Novell® edition of OpenOffice.org and some of the key features you should be aware of when getting started with the suite.

- Section 3.1, “Understanding OpenOffice.org” (page 104)
- Section 3.2, “Word Processing with Writer” (page 113)
- Section 3.3, “Using Spreadsheets with Calc” (page 124)
- Section 3.4, “Using Presentations with Impress” (page 126)
- Section 3.5, “Using Databases with Base” (page 129)
- Section 3.6, “Creating Graphics with Draw” (page 133)
- Section 3.7, “Creating Mathematical Formulas with Math” (page 134)
- Section 3.8, “Finding Help and Information About OpenOffice.org” (page 134)

OpenOffice.org consists of several application modules (subprograms), which are designed to interact with each other. They are listed in Table 3.1, “The OpenOffice.org Application Modules” (page 104). A full description of each module is available in the

online help, described in Section 3.8, “Finding Help and Information About OpenOffice.org” (page 134).

Table 3.1 *The OpenOffice.org Application Modules*

Module	Purpose
Writer	Word processor application module
Calc	Spreadsheet application module
Impress	Presentation application module
Base	Database application module
Draw	Application module for drawing vector graphics
Math	Application module for generating mathematical formulas

The appearance of the application varies depending on the desktop or window manager you use. Regardless of the appearance, the basic layout and functions are the same.

3.1 Understanding OpenOffice.org

This section contains information that applies to all of the application modules in OpenOffice.org. Module-specific information can be found in the sections relating to each module.

- Section 3.1.1, “Using the Standard Edition of OpenOffice.org” (page 105)
- Section 3.1.2, “Compatibility with Other Office Applications” (page 105)
- Section 3.1.3, “Starting OpenOffice.org” (page 107)
- Section 3.1.4, “Improving OpenOffice.org Load Time” (page 108)
- Section 3.1.5, “Customizing OpenOffice.org” (page 108)
- Section 3.1.6, “Finding Templates” (page 112)

3.1.1 Using the Standard Edition of OpenOffice.org

You can use the standard edition of OpenOffice.org rather than the Novell edition. If you install the latest version of OpenOffice.org, all of your Novell Edition files remain compatible. However, the standard edition does not contain enhancements made in the Novell edition.

3.1.2 Compatibility with Other Office Applications

OpenOffice.org can work with documents, spreadsheets, presentations, and databases in many other formats, including Microsoft Office. They can be seamlessly opened like other files and saved back to the original format. Because the Microsoft formats are proprietary and the specifications are not available to other applications, there are occasionally formatting issues. If you have problems with your documents, consider opening them in the original application and resaving in an open format such as RTF for text documents or CSV for spreadsheets.

TIP

For good information about migrating from other office suites to OpenOffice.org, refer to the OpenOffice.org Migration Guide [http://documentation.openoffice.org/manuals/oooauthors2/0600MG-MigrationGuide.pdf].

Converting Documents to the OpenOffice.org Format

OpenOffice.org can read, edit, and save documents in a number of formats. It is not necessary to convert files from those formats to the OpenOffice.org format to use those files. However, if you want to convert the files, you can do so. To convert a number of documents, such as when first switching to OpenOffice.org, do the following:

1. Select *File* → *Wizard* → *Document Converter*.
2. Choose the file format from which to convert.

There are several StarOffice and Microsoft Office formats available.

3 Click *Next*.

4 Specify where OpenOffice.org should look for templates and documents to convert and in which directory the converted files should be placed.

IMPORTANT

Documents from a Windows partition are usually in a subdirectory of `/windows`.

5 Make sure that all other settings are appropriate, then click *Next*.

6 Review the summary of the actions to perform, then start the conversion by clicking *Convert*.

The amount of time needed for the conversion depends on the number of files and their complexity. For most documents, conversion does not take very long.

Sharing Files with Users of Other Office Suites

OpenOffice.org is available for a number of operating systems. This makes it an excellent tool when a group of users frequently need to share files and do not use the same system on their computers.

When sharing documents with others, you have several options.

If the recipient needs to be able to edit the file: Save the document in the format the other user needs. For example, to save as a Microsoft Word file, click *File → Save As*, then select the Microsoft Word file type for the version of Word the other user needs.

If the recipient only needs to read the document: Export the document to a PDF file with *File → Export as PDF*. PDF files can be read on any platform using a viewer like Adobe Acrobat Reader.

If you want to share a document for editing: Use one of the standard document formats. The default formats comply with the OASIS standard XML format, making them compatible with a number of applications. TXT and RTF formats, although limited

in formatting, might be a good option for text documents. CSV is useful for spreadsheets. OpenOffice.org might also offer your recipient's preferred format, especially Microsoft formats.

If you want to e-mail a document as a PDF: Click *File → Send → Document as PDF Attachment*.Your default e-mail program opens with the file attached.

If you want to e-mail a document to a Microsoft Word user: Click *File → Send → Document as MS-Doc Attachment*. Your default e-mail program opens with the file attached.

3.1.3 Starting OpenOffice.org

1. Start the application in one of the following ways:

   - On the menu bar, click .

     This opens Writer. To open a different module, click *File → New* from the newly opened Writer document, then choose the module you want to open.

   - From the Computer menu, click *Computer → More Applications → Office*, then click the name of the OpenOffice.org module you want to start.

   - In a terminal window, enter `ooffice`. The OpenOffice.org window opens. Click *File → New*, then choose the module you want to open.

2. Select the module you want to open.

If any OpenOffice.org application is open, you can open any of the other applications by clicking *File → New → Name of Application*.

3.1.4 Improving OpenOffice.org Load Time

To speed up the load time of OpenOffice.org by preloading the application at system startup:

1. Click *Tools* → *Options* → *Memory*.
2. Select *Start at Startup*.

The next time you restart your system, OpenOffice.org will preload. When you open an OpenOffice.org application module, it will open faster.

3.1.5 Customizing OpenOffice.org

You can customize OpenOffice.org to best suit your needs and working style. Toolbars, menus, and keyboard shortcuts can all be reconfigured to help you more quickly access the features you use the most. You can also assign macros to application events if you want specific actions to occur when those events take place. For example, if you always work with a specific spreadsheet, you can create a macro that opens the spreadsheet and assign it to the Start Application event.

This section contains simple, generic instructions for customizing your environment. The changes you make are effective immediately, so you can see if the changes are what you wanted and go back and modify them if they weren't. See the OpenOffice.org help files for detailed instructions.

Customizing Toolbars

Use the *Customize* dialog to modify OpenOffice.org toolbars.

1. Click the arrow icon at the end of any toolbar.
2. Click *Customize Toolbar*.
3. Select the toolbar you want to customize.
4. Select the check boxes next to the commands you want to appear on the toolbar, and deselect the check boxes next to the commands you don't want to appear.

5 Select whether to save your customized toolbar in the OpenOffice.org module you are using or in the document.

- OpenOffice.org module

  The customized toolbar is used whenever you open that module.

- Document filename

  The customized toolbar is used whenever you open that document.

6 Repeat to customize additional toolbars.

7 Click *OK*.

You can quickly choose the buttons that appear on a particular toolbar.

1 Click the arrow icon at the end of the toolbar you want to change.

2 Click *Visible Buttons* to display a list of buttons.

3 Select the buttons in the list that appears to enable (check) or disable (uncheck) them.

Customizing Menus

You can add or delete items from current menus, reorganize menus, and even create new menus.

1 Click *Tools* → *Customize* → *Menu*.

2 Select the menu you want to change, or click *New* to create a new menu.

  Click *Help* for more information about the options in the *Customize* dialog.

3 Modify, add, or delete menu items as desired.

4 Click *OK*.

Customizing Keyboard Shortcuts

You can reassign currently assigned keyboard shortcuts and assign new shortcuts to frequently used functions.

1. Click *Tools* → *Customize* → *Keyboard*.
2. Select the keys you want to assign to a function, or select the function and assign the keys or key combinations.

   Click *Help* for more information about the options in the *Customize* dialog.
3. Modify, add, or delete keyboard shortcuts as desired.
4. Click *OK*.

Customizing Events

OpenOffice.org also provides ways to assign macros to events such as application startup or the saving of a document. The assigned macro runs automatically whenever the selected event occurs.

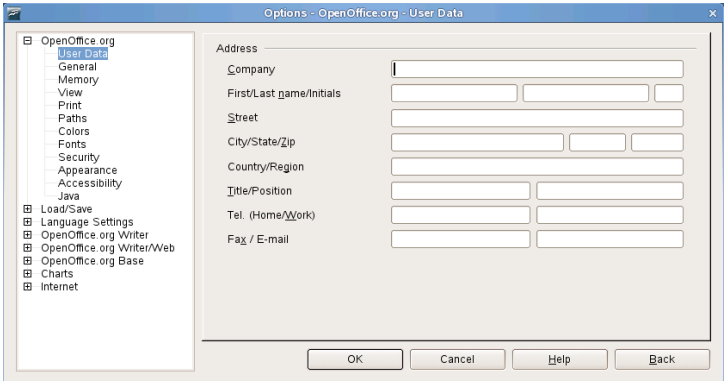
1. Click *Tools* → *Customize* → *Events*.
2. Select the event you want to change.

   Click *Help* for more information about the options in the *Customize* dialog box.
3. Assign or remove macros for the selected event.
4. Click *OK*.

Changing the Global Settings

Global settings can be changed in any OpenOffice.org application by clicking *Tools* → *Options* on the menu bar. This opens the window shown in the figure below. A tree structure is used to display categories of settings.

Figure 3.1 *The Options Window*



The following table lists the settings categories along with a brief description of each category:

Table 3.2 *Global Setting Categories*

Settings Category	Description
OpenOffice.org	Various basic settings, including your user data (such as your address and e-mail), important paths, and settings for printers and external programs.
Load/Save	Includes the settings related to the opening and saving of several file types. There is a dialog for general settings and several special dialogs to define how external formats should be handled.
Language Settings	Covers the various settings related to languages and writing aids, such as your locale and spell checker settings. This is also the place to enable support for Asian languages.
Internet	Includes the dialogs to configure any proxies and to change settings related to search engines.
Text Document	Configures the global word processing options, such as the basic fonts and layout that Writer should use.

Settings Category	Description
HTML Document	Changes the settings related to the HTML authoring features of OpenOffice.org.
Spreadsheet	Changes the settings for Calc, such as those related to sort lists and grids.
Presentation	Changes the settings that should apply to all presentations. For example, you can specify the measurement unit for the grid used to arrange elements.
Drawing	Includes the settings related to the vector drawing module, such as the drawing scale, grid properties, and some print options.
Formula	Provides a single dialog to set special print options for formulas.
Chart	Defines the default colors used for newly created charts.
Data Sources	Defines how external data sources should be accessed.

IMPORTANT

All settings listed in the table are applied *globally*. They are used as defaults for every new document you create.

3.1.6 Finding Templates

Templates greatly enhance the use of OpenOffice.org by simplifying formatting tasks for a variety of different types of documents. OpenOffice.org comes with a few templates, and you can find additional templates on the Internet. You can also create your own. Creating templates is beyond the scope of this guide, but detailed instructions are found in the OpenOffice.org help system and in other documents and tutorials available online.

In addition to templates, you can find other extras and add-ins online. The following table lists a few of the prominent places where you can find templates and other extras. (Because Web sites often close or their content changes, the information in the following table might not be current when you read it.)

Table 3.3 *Where to Find OpenOffice.org Templates and Extras*

Location	What You Can Find
OpenOffice.org documentation Web site [http://documentation.openoffice.org/Samples_Templates/User/template_2_x/index.html]	Templates for Calc spreadsheets, CD cases, seed packets, fax cover sheets, and more
Worldlabel.com [http://www.worldlabel.com/Pages/openoffice-template.htm]	Templates for many types of labels

For more information about templates, see Section 3.2.4, "Using Templates to Format Documents" (page 119) and Section 3.3.2, "Using Templates in Calc" (page 125).

3.2 Word Processing with Writer

OpenOffice.org Writer is a full-featured word processor with page and text formatting capabilities. Its interface is similar to interfaces for other major word processors, and it includes some features that are usually found only in expensive desktop publishing applications.

This section highlights a few key features of Writer. For more information about these features and for complete instructions for using Writer, look at the OpenOffice.org help or any of the sources listed in Section 3.8, "Finding Help and Information About OpenOffice.org" (page 134).

NOTE

Much of the information in this section can also be applied to other OpenOffice.org modules. For example, other modules use styles similarly to how they are used in Writer.

- Section 3.2.1, "Creating a New Document" (page 114)
- Section 3.2.2, "Sharing Documents with Other Word Processors" (page 115)
- Section 3.2.3, "Formatting with Styles" (page 116)
- Section 3.2.4, "Using Templates to Format Documents" (page 119)
- Section 3.2.5, "Working with Large Documents" (page 120)
- Section 3.2.6, "Using Writer as an HTML Editor" (page 123)

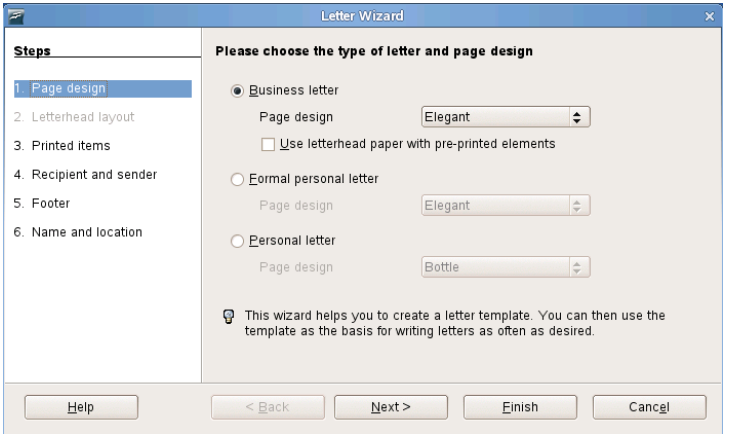
3.2.1 Creating a New Document

There are two ways to create a new document:

To create a document from scratch, click *File* → *New* → *Text Document*.

To use a standard format and predefined elements for your own documents, try a wizard. Wizards are small utilities that let you make some basic decisions then produce a ready-made document from a template. For example, to create a business letter, click *File* → *Wizards* → *Letter*. Using the wizard's dialogs, easily create a basic document using a standard format. A sample wizard dialog is shown in Figure 3.2, "An OpenOffice.org Wizard" (page 115).

Figure 3.2 *An OpenOffice.org Wizard*



Enter text in the document window as desired. Use the *Formatting* toolbar or the *Format* menu to adjust the appearance of the document. Use the *File* menu or the relevant buttons in the toolbar to print and save your document. With the options under *Insert*, add extra items to your document, such as a table, picture, or chart.

3.2.2 Sharing Documents with Other Word Processors

You can use Writer to edit documents created in a variety of other word processors. For example, you can import a Microsoft Word document, edit it, and save it again as a Word document. Most Word documents can be imported into OpenOffice.org without any problem. Formatting, fonts, and all other aspects of the document remain intact. However, some very complex documents—such as documents containing complicated tables, Word macros, or unusual fonts or formatting—might require some editing after being imported. OpenOffice.org can also save in many popular word processing formats. Likewise, documents created in OpenOffice.org and saved as Word files can be opened in Microsoft Word without any trouble.

So, if you use OpenOffice.org in an environment where you frequently share documents with Word users, you should have little or no trouble exchanging document files. Just open the files, edit them, and save them as Word files.

3.2.3 Formatting with Styles

OpenOffice.org uses styles for applying consistent formatting to various elements in a document. The following types of styles are available:

Table 3.4 *About the Types of Styles*

Type of Style	What it Does
Paragraph	Applies standardized formatting to the various types of paragraphs in your document. For example, apply a paragraph style to a first-level heading to set the font and font size, spacing above and below the heading, location of the heading, and other formatting specifications.
Character	Applies standardized formatting for types of text. For example, if you want emphasized text to appear in italics, you can create an emphasis style that italicizes selected text when you apply the style to it.
Frame	Applies standardized formatting to frames. For example, if your document uses sidebars, you can create frames with specified graphics, borders, location, and other formatting so that all of your sidebars have a consistent appearance.
Page	Applies standardized formatting to a specified type of page. For example, if every page of your document contains a header and footer except for the first page, you can use a first page style that disables headers and footers. You can also use different page styles for left and right pages so that you have bigger margins on the insides of pages and your page numbers appear on an outside corner.
List	Applies standardized formatting to specified list types. For example, you can define a checklist with square check boxes and a bullet list with round bullets, then easily apply the correct style when creating your lists.

Opening the Styles and Formatting Window

The *Styles and Formatting* window (called the *Stylist* in earlier versions of OpenOffice.org), is a versatile formatting tool for applying styles to text, paragraphs, pages, frames, and lists. To open this window, click *Format → Styles and Formatting*. OpenOffice.org comes with several predefined styles. You can use these styles as they are, modify them, or create new styles.

TIP

By default, the *Styles and Formatting* window is a floating window; that is, it opens in its own window that you can place anywhere on the screen. If you use styles extensively, you might find it helpful to dock the window so that it always present in the same part of the Writer interface. To dock the *Styles and Formatting* window, press Ctrl while you double-click on a gray area in the window. This tip applies to some other windows in OpenOffice.org as well, including the Navigator.

Applying a Style

To apply a style, select the element you want to apply the style to, and then double-click the style in the *Styles and Formatting* window. For example, to apply a style to a paragraph, place the cursor anywhere in that paragraph and double-click the desired style.

Using Styles Versus Using Formatting Buttons and Menu Options

Using styles rather than the *Format* menu options and buttons helps give your pages, paragraphs, texts, and lists a more consistent look and makes it easier to change your formatting. For example, if you emphasize text by selecting it and clicking the *Bold* button, then later decide you want emphasized text to be italicized, you need to find all of your bolded text and manually change it to italics. If you use a character style, you only need to change the style from bold to italics and all text that has been formatted with that style automatically changes from bold to italics.

Text formatted with a menu option or button overrides any styles you have applied. If you use the *Bold* button to format some text and an emphasis style to format other text,

then changing the style does not change the text that you formatted with the button, even if you later apply the style to the text you bolded with the button. You must manually unbold the text and then apply the style.

Likewise, if you manually format your paragraphs using *Format → Paragraph*, it is easy to end up with inconsistent paragraph formatting. This is especially true if you copy and paste paragraphs from other documents with different formatting.

Changing a Style

Styles are powerful because you can change formatting throughout a document by changing a style, rather than applying the change separately everywhere you want to apply the new formatting.

1. In the *Styles and Formatting* window, right-click the style you want to change.
2. Click *Modify*.
3. Change the settings for the selected style.

   For information about the available settings, refer to the OpenOffice.org online help.
4. Click *OK*.

Creating a Style

OpenOffice.org comes with a collection of styles to suit many users' needs. However, most users eventually need a style that does not yet exist. To create a new style:

1. Right-click in any empty space in the *Styles and Formatting* window.

   Make sure you are in the list of styles for the type of style you want to create. For example, if you are creating a character style, make sure you are in the character style list.
2. Click *New*.
3. Click *OK*.

4 Name your style and choose the settings you want applied with that style.

For details about the style options available in any tab, click that tab and then click *Help*.

3.2.4 Using Templates to Format Documents

Most word processor users create more than one kind of document. For example, you might write letters, memos, and reports, all of which look different and require different styles. If you create a template for each of your document types, the styles you need for each document are always readily available.

Creating a template requires a little bit of up-front planning. You need to determine what you want the document to look like so you can create the styles you need in that template. You can always change your template, but a little planning can save you a lot of time later.

NOTE

You can convert Microsoft Word templates like you would any other Word document. See Section "Converting Documents to the OpenOffice.org Format" (page 105) for information.

A detailed explanation of templates is beyond the scope of this section. However, more information is found in the help system, and detailed how-tos are found at the OpenOffice.org Documentation page [http://documentation.openoffice.org/HOW_TO/index.html].

Creating a Template

A template is a text document containing only the styles and content that you want to appear in every document, such as your address information and letterhead on a letter. When a document is created or opened with the template, the styles are automatically applied to that document.

To create a template:

1. Click *File* → *New* → *Text Document*.
2. Create the styles and content that you want to use in any document that uses this template.
3. Click *File* → *Templates* → *Save*.
4. Specify a name for the template.
5. In the *Categories* box, click the category you want to place the template in.

   The category is the folder where the template is stored.
6. Click *OK*.

3.2.5 Working with Large Documents

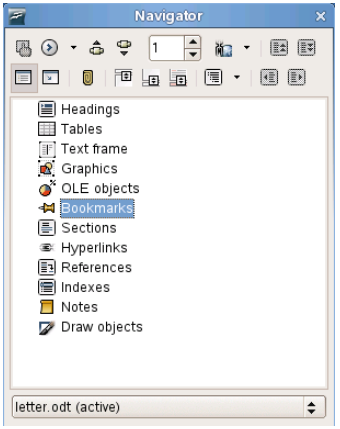
You can use Writer to work on large documents. Large documents can be either a single file or a collection of files assembled into a single document.

Navigating in Large Documents

The Navigator tool displays information about the contents of a document. It also lets you quickly jump to different elements. For example, you can use the Navigator to get a quick overview of all images included in the document.

To open the Navigator, click *Edit* → *Navigator*. The elements listed in the Navigator vary according to the document loaded in Writer.

Figure 3.3 *Navigator Tool in Writer*



Click an item in the Navigator to jump to that item in the document.

Creating a Single Document from Multiple Documents

If you are working with a very large document, such as a book, you might find it easier to manage the book with a master document, rather than keeping the book in a single file. A master document enables you to quickly apply formatting changes to a large document or to jump to each subdocument for editing.

A master document is a Writer document that serves as a container for individual Writer files. You can maintain chapters or other subdocuments as individual files collected in the master document. Master documents are also useful if multiple people are working on a document. You can separate each person's portion of the document into subdocuments collected in a master document, allowing multiple writers to work on their subdocuments at the same time without fear of overwriting other people's work.

NOTE

If you are coming to OpenOffice.org from Microsoft Word, you might be nervous about using master documents because the master document feature in Word has a reputation for corrupting documents. This problem does not exist in OpenOffice.org Writer, so you can safely use master documents to manage your projects.

To create a master document:

1. Click *New → Master Document*.

   or

   Open an existing document and click *File → Send → Create Master Document*.

2. Insert subdocuments.

3. Click *FileSave*.

The OpenOffice.org help files contain more complete information about working with master documents. Look for the topic entitled "Using Master Documents and Subdocuments."

TIP

The styles from all of your subdocuments are imported into the master document. To ensure that formatting is consistent throughout your master document, you should use the same template for each subdocument. Doing so is not mandatory; however, if subdocuments are formatted differently, you will probably need to do some reformatting to successfully bring subdocuments into the master document without creating inconsistencies. For example, if two documents imported into your master document include different styles with the same name, the master document will use the formatting specified for that style in the first document you import.

3.2.6 Using Writer as an HTML Editor

In addition to being a full-featured word processor, Writer also functions as an HTML editor. Writer includes HTML tags that can be applied as you would any other style in a Writer document. You can view the document as it will appear online, or you can directly edit the HTML code.

Creating an HTML Document

1. Click *File → New → HTML Document*.
2. Click the arrow at the bottom of the *Formatting and Styles* window.
3. Select *HTML Styles*.
4. Create your HTML document, using the styles to tag your text.
5. Click *FileSave As*.
6. Select the location where you want to save your file, name the file, and select *HTML Document (.html)* from the *Filter* list.
7. Click *OK*.

If you prefer to edit HTML code directly, or if you want to see the HTML code created when you edited the HTML file as a Writer document, click *View → HTML Source*. In HTML Source mode, the *Formatting and Styles* list is no longer available.

NOTE

The first time you switch to HTML Source mode, you are prompted to save the file as HTML, if you have not already done so.

3.3 Using Spreadsheets with Calc

Calc is the OpenOffice.org spreadsheet application. Create a new spreadsheet with *File → New → Spreadsheet* or open one with *File → Open*. Calc can read and save in Microsoft Excel's format, so it is easy to exchange spreadsheets with Excel users.

NOTE

Calc can process many VBA macros in Excel documents; however, support for VBA macros is not yet complete. When opening an Excel spreadsheet that makes heavy use of macros, you might discover that some do not work.

In the spreadsheet cells, enter fixed data or formulas. A formula can manipulate data from other cells to generate a value for the cell in which it is inserted. You can also create charts from cell values.

- Section 3.3.1, "Using Formatting and Styles in Calc" (page 124)
- Section 3.3.2, "Using Templates in Calc" (page 125)

3.3.1 Using Formatting and Styles in Calc

Calc comes with a few built-in cell and page styles to improve the appearance of your spreadsheets and reports. Although these built-in styles are adequate for many uses, you will probably find it useful to create styles for your own frequently used formatting preferences.

Creating a Style

1. Click *Format → Styles and Formatting*.
2. In the *Formatting and Styles* window, click either the *Cell Styles* or the *Page Styles* icon.
3. Right-click in the *Formatting and Styles* window, then click *New*.
4. Specify a name for your style and use the various tabs to set the desired formatting options.

5 Click *OK*.

Modifying a Style

1 Click *Format* → *Styles and Formatting*.

2 In the *Formatting and Styles* window, click either the *Cell Styles* or the *Page Styles* icon.

3 Right-click the name of the style you want to change, then click *Modify*.

4 Change the desired formatting options.

5 Click OK.

3.3.2 Using Templates in Calc

If you use different styles for different types of spreadsheets, you can use templates to save your styles for each spreadsheet type. Then, when you create a particular type of spreadsheet, open the applicable template and the styles you need for that template are available in the *Formatting and Styles* window.

A detailed explanation of templates is beyond the scope of this section. However, more information is found in the help system and detailed how-tos are found at the OpenOffice.org Documentation page [http://documentation.openoffice.org/HOW_TO/index.html].

Creating a Template

A Calc template is a spreadsheet that contains styles and content that you want to appear in every spreadsheet created with that template, such as headings or other cell styles. When a spreadsheet is created or opened with the template, the styles are automatically applied to that spreadsheet.

To create a template:

1. Click *File* → *New* → *Spreadsheet*.
2. Create the styles and content that you want to use in any spreadsheet that uses this template.
3. Click *File* → *Templates* → *Save*.
4. Specify a name for the template.
5. In the *Categories* box, click the category you want to place the template in.

   The category is the folder where the template is stored.
6. Click *OK*.

3.4 Using Presentations with Impress

Use OpenOffice.org Impress to create presentations for screen display or printing, such as slide shows or transparencies. If you have used other presentation software, you can move comfortably to Impress, which works very similarly to other presentation software.

Impress can open and save Microsoft Powerpoint presentations, which means you can exchange presentations with Powerpoint users, as long as you save your presentations in Powerpoint format.

- Section 3.4.1, "Creating a Presentation" (page 126)
- Section 3.4.2, "Using Master Pages" (page 127)

3.4.1 Creating a Presentation

1. Click *File* → *New* → *Presentation*.
2. Select the option to use for creating the presentation.

There are two ways to create a presentation:

- Create an empty presentation

  Opens Impress with a blank slide. Use this option to create a new presentation from scratch, without any preformatted slides.

- Create a presentation from a template

  Opens Impress with your choice of template. Use this option to create a new presentation with a predesigned OpenOffice.org template or a template you've created or installed yourself, such as your company's presentation template. Impress uses styles and templates the same way other OpenOffice.org modules do. See Section 3.2.4, "Using Templates to Format Documents" (page 119) for more information about templates.

3.4.2 Using Master Pages

Master pages give your presentation a consistent look by defining the way each slide looks, what fonts are used, and other graphical elements. Impress uses two types of master pages:

- Slide master

  Contains elements that appear on all slides. For example, you might want your company logo to appear in the same place on every slide. The slide master also determines the text formatting style for the heading and outline of every slide that uses that master page, as well as any information you want to appear in a header or footer.

- Notes master

  Determines the formatting and appearance of the notes in your presentation.

Creating a Slide Master

Impress comes with a collection of preformatted master pages. Eventually, most users will want to customize their presentations by creating their own slide masters.

1. Start Impress, then create a new empty presentation.
2. Click *View* → *Master* → *Slide Master*.

   This opens the current slide master in Master View.
3. Right-click the left-hand panel, then click *New Master*.
4. Edit the slide master until it has the desired look.
5. Click *Close Master View* or *View* → *Normal* to return to Normal View.

TIP

When you have created all of the slide masters you want to use in your presentations, you can save them in an Impress template. Then, any time you want to create presentations that use those slide masters, open a new presentation with your template.

Applying a Slide Master

Slide masters can be applied to selected slides or to all slides in the presentation.

1. Open your presentation, then click *View* → *Master* → *Slide Master*.
2. (Optional) If you want to apply the slide master to multiple slides, but not to all slides, select the slides that you want to use that slide master.

   To select multiple slides, in the Slides Pane, Control-click on the slides you want to use that slide master.
3. In the Task Pane, right-click the master page you want to apply.

   If you do not see the Task Pane, click *View* → *Task Pane*.

4 Apply the slide master by clicking one of the following:.

- *Apply to All Slides*

  Applies the selected slide master to all slides in the presentation.

- *Apply to Selected Slides*

  Applies the selected slide master to the current slide, or to any slides you select before applying the slide master. For example, if you want to apply a different slide master to the first slide in a presentation, select that slide, then change to Master View and apply a slide master to that slide.

3.5 Using Databases with Base

OpenOffice 2.0 introduces a new database module, Base. Use Base to design a database to store many different kinds of information, from a simple address book or recipe file to a sophisticated document management system.

Tables, forms, queries, and reports can be created manually or using convenient wizards. For example, the Table Wizard contains a number of common fields for business and personal use. Databases created in Base can be used as data sources, such as when creating form letters.

It is beyond the scope of this document to detail database design with Base. More information can be found at the sources listed in Section 3.8, "Finding Help and Information About OpenOffice.org" (page 134).

3.5.1 Creating a Database Using Predefined Options

Base comes with several predefined database fields to help you create a database. The steps in this section are specific to creating an address book using predefined fields, but it should be easy to follow them to use the predefined fields for any of the built-in database options.

The process for creating a database can be broken into several subprocesses:

- Section "Creating the Database" (page 130)
- Section "Setting Up the Database Table" (page 130)
- Section "Creating a Form" (page 131)
- Section "Modifying the Form" (page 132)
- Section "What's Next?" (page 132)

Creating the Database

First, create the database.

1. Click *File* → *New* → *Database*.
2. Select *Create a new database*, then click *Next*.
3. Click *Yes, register the database for me* to make your database information available to other OpenOffice.org modules, select both check boxes in the bottom half of the dialog, then click *Finish*.
4. Browse to the directory where you want to save the database, specify a name for the database, then click *OK*.

Setting Up the Database Table

Next, define the fields you want to use in your database table.

1. In the Table Wizard, click *Personal*.

   The *Sample tables* list changes to show the predefined tables for personal use. If you had clicked *Business*, the list would contain predefined business tables.

2. In the *Sample tables* list, click *Addresses*.

   The available fields for the predefined address book appear in the *Available fields* menu.

3. In the *Available fields* menu, click the fields you want to use in your address book.

   You can select one item at a time, or you can shift-click multiple items to select them.

4. Click the single right-arrow to move the selected items to the *Selected fields* menu.

   To move all available fields to the *Selected fields* menu, click the double right-arrow.

5. Use the up-arrow and down-arrow to adjust the order of the selected fields.

   The fields appear in the table and forms in the order in which they are listed.

6. Click *Next*.

7. Make sure each of the fields is defined correctly.

   You can change the field name, type, whether the entry is required, and the maximum length of the field (the number of characters that can be entered in that field. For this example, leave the settings as they are.

8. Click *Next*.

9. Click *Create a primary key*, click *Automatically add a primary key*, click *Auto value*, then click *Next*.

10. Accept the default name for the table, select *Create a form based on this tabl*e, then click *Finish*.

Creating a Form

Next, create the form to use when entering data into your address book.

1. In the Form Wizard, click the double right-arrow to move all available fields to the *Fields in the form* list, then click *Next* twice.

2. Select how you want to arrange your form, then click *Next*.

3 Select the option to use the form to display all data and leave all of the check boxes empty, then click *Next*.

4 Apply a style and field border, then click *Next*.

For this example, accept the default selections.

5 Name the form, select the *Modify the form* option, then click *Finish*.

Modifying the Form

After the form has been defined, you can modify the appearance of the form to suit your preferences.

1 Close the form that opened when you finished the previous step.

2 In the main window for your database, right-click the form you want to modify (there should be only one option), then click *Edit*.

3 Arrange the fields on the form by dragging them to their new locations.

For example, move the First Name field so it appears to the right of the Last Name field, and then adjust the locations of the other fields to suit your preference.

4 When you have finished modifying the form, save it and close it.

What's Next?

After you have created your database tables and forms, you are ready to enter your data. You can also design queries and reports to help sort and display the data.

Refer to OpenOffice.org online help and other sources listed in Section 3.8, "Finding Help and Information About OpenOffice.org" (page 134) for additional information about Base.

3.6 Creating Graphics with Draw

Use OpenOffice.org Draw to create graphics and diagrams. You can save your drawings in today's most common formats and import them into any application that lets you import graphics, including the other OpenOffice.org modules. You can also create Flash versions of your drawings.

The OpenOffice.org documentation contains complete instructions on using Draw. See Section 3.8, "Finding Help and Information About OpenOffice.org" (page 134) for more information.

To use a Draw graphic in a document:

1. Open Draw, then create the graphic.
2. Save the graphic.
3. Copy the graphic and paste it into the document, or insert the graphic directly from the document.

One particularly useful feature of Draw is the ability to open it from other OpenOffice.org modules so you can create a drawing that is automatically imported into your document.

1. From an OpenOffice.org module (for example, from Writer), click *Insert → Object → OLE Object → OpenOffice.org 2.0 Drawing → OK*.

   This opens Draw.
2. Create your drawing.
3. Click in your document, outside the Draw frame.

   The drawing is automatically inserted into your document.

3.7 Creating Mathematical Formulas with Math

It is usually difficult to include complex mathematical formulas in your documents. The OpenOffice.org Math equation editor lets you create formulas using operators, functions, and formatting assistants. You can then save those formulas as objects that can be imported into other documents. Math functions can be inserted into other OpenOffice.org documents like any other graphic object.

NOTE

Math is not a calculator. The functions it creates are graphical objects. Even if they are imported into Calc, these functions cannot be evaluated.

3.8 Finding Help and Information About OpenOffice.org

OpenOffice.org contains extensive online help. In addition, a large community of users and developers support it. As a result, it is seldom hard to find help or information about using the OpenOffice.org. The following table shows some of the places where you can go for additional information. (Because Web sites often close or their content changes, the information in the following table might not be current when you read it.)

Table 3.5 *Where to Get Information About OpenOffice.org*

Location	What You Can Find
OpenOffice.org online help menu	Extensive help on performing any task in OpenOffice.org
Official OpenOffice.org support page [http://support.openoffice.org/index.html]	Manuals, tutorials, user and developer forums, users@openoffice.org mailing list, FAQs, and much more

Location	What You Can Find
OpenOffice.org Migration Guide [oooauthors.org/en/authors/userguide2/migration/OtherMSOFiles_25_June_PK.sxw]	Information about migrating to OpenOffice.org from other office suites, including Microsoft Office
Taming OpenOffice.org [http://www.taming-openoffice-org.com/]	Books, news, tips and tricks
OpenOffice.org Macros [http://www.pitonyak.org/oo.php]	Extensive information about creating and using macros

Evolution: E-Mail and Calendaring

4

Evolution™ makes the tasks of storing, organizing, and retrieving your personal information easy, so you can work and communicate more effectively with others. It's a highly evolved groupware program, an integral part of the Internet-connected desktop.

Evolution can help you work in a group by handling e-mail, address, and other contact information, and one or more calendars. It can do that on one or several computers, connected directly or over a network, for one person or for large groups.

With Evolution, you can accomplish your most common daily tasks quickly. For example, it takes only one or two clicks to enter appointment or contact information sent to you by e-mail, or to send e-mail to a contact or appointment. People who get lots of e-mail will appreciate advanced features like search folders, which let you save searches as though they were ordinary e-mail folders.

This chapter introduces you to Evolution and helps you get started using it. For complete information, refer to the Evolution documentation.

- Section 4.1, "Starting Evolution for the First Time" (page 138)
- Section 4.2, "Using Evolution: An Overview" (page 149)

4.1 Starting Evolution for the First Time

Start the Evolution client by clicking *Computer* → *More Applications* → *Office* → *Evolution*, or by typing `evolution` in a terminal window.

4.1.1 Using the Setup Assistant

The first time you run Evolution, it creates a directory called `.evolution` in your home directory, where it stores all of its local data. Then, it opens a Setup Assistant to help you set up e-mail accounts and import data from other applications.

Using the Setup Assistant takes two to five minutes.

Later on, if you want to change this account, or if you want to create a new one, click *Edit* → *Preferences*, then click *Mail Accounts*. Select the account you want to change, then click *Edit*. Alternately, add a new account by clicking *Add*.

The Setup Assistant helps you provide the information Evolution needs to get started.

- Section “Defining Your Identity” (page 138)
- Section “Receiving Mail” (page 139)
- Section “Receiving Mail Options” (page 142)
- Section “Sending Mail” (page 147)
- Section “Account Management” (page 148)
- Section “Time Zone” (page 148)
- Section “Importing Mail (Optional)” (page 149)

Defining Your Identity

The Identity window is the first step in the assistant.

Here, you enter some basic personal information. You can define multiple identities later by clicking *Edit → Preferences*, then clicking *Mail Accounts*.

When the First-Run Assistant starts, the Welcome page is displayed. Click *Forward* to proceed to the Identity window.

1. Type your full name in the *Full Name* field.
2. Type your e-mail address in the *E-Mail Address* field.
3. (Optional) Select if this account is your default account.
4. (Optional) Type a reply to address in the *Reply-To* field.

   Use this field if you want replies to e-mails sent to a different address.
5. (Optional) Type your organization name in the *Organization* field.

   This is the company where you work, or the organization you represent when you send e-mail.
6. Click *Forward*.

Receiving Mail

The Receiving E-mail option lets you determine where you get your e-mail.

You need to specify the type of server you want to receive mail with. If you are unsure about the type of server to choose, ask your system administrator or ISP.

- Select a server type in the *Server Type* list.

  The following a list of server types that are available:

  Novell GroupWise: Select this option if you connect to Novell GroupWise®. Novell GroupWise keeps e-mail, calendar, and contact information on the server.

  Microsoft Exchange: Available only if you have installed the Connector for Microsoft* Exchange. It allows you to connect to a Microsoft Exchange 2000 or 2003 server, which stores e-mail, calendar, and contact information on the server.

IMAP: Keeps the e-mail on your server so you can access your e-mail from multiple systems.

IMAP4rev1: Keeps the e-mail on your server so you can access your e-mail from multiple systems.

POP: Downloads your e-mail to your hard disk for permanent storage, freeing up space on the e-mail server.

USENET News: Connects to the news server and downloads a list of available news digests.

Local Delivery: Choose this option if you want to move e-mail from the spool (the location where mail waits for delivery) and store it in your home directory. You need to provide the path to the mail spool you want to use. If you want to leave e-mail in your system's spool files, choose the Standard Unix Mbox Spool option instead.

MH Format Mail Directories: If you download your e-mail using mh or another MH-style program, you should use this option. You need to provide the path to the mail directory you want to use.

Maildir Format Mail Directories: If you download your e-mail using Qmail or another maildir-style program, you should use this option. You need to provide the path to the mail directory you want to use.

Standard Unix Mbox Spool or Directory: If you want to read and store e-mail in the mail spool on your local system, choose this option. You need to provide the path to the mail spool you want to use.

None: Select this if you do not plan to check e-mail with this account. If you select this, there are no configuration options.

Remote Configuration Options

If you selected Novell GroupWise, IMAP, POP, or USENET News as your server, you need to specify additional information.

1 Type the hostname of your e-mail server in the *Hostname* field.

If you don't know the hostname, contact your administrator.

2 Type your username for the account in the *Username* field.

3 Select to use a secure (SSL) connection.

If your server supports secure connections, you should enable this security option. If you are unsure if your server supports a secure connection, contact your system administrator.

4 Select your authentication type in the *Authentication* list.

or

Click *Check for Supported Types* to have Evolution check for supported types. Some servers do not announce the authentication mechanisms they support, so clicking this button is not a guarantee that available mechanisms actually work.

If you are unsure what authentication type you need, contact your system administrator.

5 Select if you want Evolution to remember your password.

6 Click *Forward*.

7 (Conditional) If you chose Microsoft Exchange, provide your username in the *Username* field and your Outlook Web Access (OWA) URL in the *OWA Url* field. OWA URL and user names should be entered as in OWA. If the mail box path is different from the username, OWA path should include mail box path also. You should see something similar to this: http://<server name>/exchange/<mail box path>

When you have finished, continue with Section "Receiving Mail Options" (page 142).

Local Configuration Options

If you selected *Local Delivery*, *MH-Format Mail Directories*, *Maildir-Format Mail Directories*, or *Standard Unix Mbox Spool or Directory*, you must specify the path to the local files in the path field. Continue with Section "Receiving Mail Options" (page 142).

Receiving Mail Options

After you have selected a mail delivery mechanism, you can set some preferences for its behavior.

- Section “Novell GroupWise Receiving Options” (page 142)
- Section “Microsoft Exchange Receiving Options” (page 143)
- Section “IMAP and IMAP4rev1 Receiving Options” (page 144)
- Section “POP Receiving Options” (page 145)
- Section “USENET News Receiving Options” (page 145)
- Section “Local Delivery Receiving Options” (page 146)
- Section “MH-Format Mail Directories Receiving Options” (page 146)
- Section “Maildir-Format Mail Directories Receiving Options” (page 146)
- Section “Standard Unix Mbox Spool or Directory Receiving Options” (page 147)

Novell GroupWise Receiving Options

If you select Novell GroupWise as your receiving server type, you need to specify the following options:

1. Select if you want Evolution to automatically check for new mail.

   If you select this option, you need to specify how often Evolution should check for new messages.

2. Select if you want to check for new messages in all folders.

3. Select if you want to apply filters to new messages in the Inbox on the server.

4. Select if you want to check new messages for junk content.

5. Select if you want to only check for junk messages in the Inbox folder.

6 Select if you want to automatically synchronize remote mail locally.

7 Type your Post Office Agent SOAP port in the *Post Office Agent SOAP Port* field.

If you are unsure what your Post Office Agent SOAP port is, contact your system administrator.

8 Click *Forward*.

When you have finished, continue with Section "Sending Mail" (page 147).

Microsoft Exchange Receiving Options

If you select Microsoft Exchange as your receiving server type, you need to specify the following options.

1 Select if you want Evolution to automatically check for new mail.

If you select this option, you need to specify how often Evolution should check for new messages.

2 Specify the Global Catalog server name in the *Global Catalog Server Name* field.

The Global Catalog Server contains the user information for users. If you are unsure what your Global Catalog server name is, contact your system administrator.

3 Select if you want to limit the number of Global Address Lists (GAL).

The GAL contains a list of all e-mail addresses. If you select this option, you need to specify the maximum number of responses.

4 Select if you want the password expire warning period.

If you select this option, you need to specify how often Evolution should send the password expire message.

5 Select if you want to automatically synchronize remote mail locally.

6 Click *Forward*.

When you have finished, continue with Section “Sending Mail” (page 147).

IMAP and IMAP4rev1 Receiving Options

If you select IMAP or IMAP4rev1 as your receiving server type, you need to specify the following options:

1. Select if you want Evolution to automatically check for new mail.

   If you select this option, you need to specify how often Evolution should check for new messages.

2. Select if you want Evolution to use custom commands to connect to Evolution.

   If you select this option, specify the custom command you want Evolution to use.

3. Select if you want Evolution to show only subscribed folders.

   Subscribed folders are folders that you have chosen to receive mail from by subscribing to them.

4. Select if you want Evolution to override server-supplied folder namespaces.

   By choosing this option you can rename the folders that the server provides. If you select this option, you need to specify the namespace to use.

5. Select if you want to apply filters to new messages in the Inbox.

6. Select if you want to check new messages for junk content.

7. Select if you want to check for junk messages in the Inbox folder.

8. Select if you want to automatically synchronize remote mail locally.

9. Click *Forward*.

When you have finished, continue with Section “Sending Mail” (page 147).

POP Receiving Options

If you select POP as your receiving server type, you need to specify the following options:

1. Select if you want Evolution to automatically check for new mail.If you select this option, you need to specify how often Evolution should check for new messages.
2. Select if you want to leave messages on the server.
3. Select if you want to disable support for all POP3 extensions (support for POP3).
4. Click *Forward*.

When you have finished, continue with Section "Sending Mail" (page 147).

USENET News Receiving Options

If you select USENET News as your receiving server type, you need to specify the following options:

1. Select if you want Evolution to automatically check for new mail.If you select this option, you need to specify how often Evolution should check for new messages.
2. Select if you want to show folders in short notation.

   For example, comp.os.linux would appear as c.o.linux.
3. Select if you want to show relative folder names in the subscription dialog box.

   If you select to show relative folder names in the subscription page, only the name of the folder is displayed. For example the folder evolution.mail would appear as evolution.
4. Click *Forward*.

When you have finished, continue with Section "Sending Mail" (page 147).

Local Delivery Receiving Options

If you select Local Delivery as your receiving server type, you need to specify the following options:

1. Select if you want Evolution to automatically check for new mail.If you select this option, you need to specify how often Evolution should check for new messages.
2. Click *Forward*.

When you have finished, continue with Section "Sending Mail" (page 147).

MH-Format Mail Directories Receiving Options

If you select MH-Format Mail Directories as your receiving server type, you need to specify the following options:

1. Select if you want Evolution to automatically check for new mail.If you select this option, you need to specify how often Evolution should check for new messages.
2. Select if you want to user the `.folders` summary file.
3. Click *Forward*.

When you have finished, continue with Section "Sending Mail" (page 147).

Maildir-Format Mail Directories Receiving Options

If you select Maildir-Format Mail Directories as your receiving server type, you need to specify the following options:

1. Select if you want Evolution to automatically check for new mail.If you select this option, you need to specify how often Evolution should check for new messages.
2. Select if you want to apply filters to new messages in the Inbox.
3. Click *Forward*.

When you have finished, continue with Section “Sending Mail” (page 147).

Standard Unix Mbox Spool or Directory Receiving Options

If you select Standard Unix Mbox Spool or Directory as your receiving server type, you need to specify the following options:

1. Select if you want Evolution to automatically check for new mail.If you select this option, you need to specify how often Evolution should check for new messages.
2. Select if you want to apply filters to new messages in the Inbox.
3. Select if you want to store status headers in Elm, Pine, and Mutt formats.
4. Click *Forward*.

When you have finished, continue with Section “Sending Mail” (page 147) Section “Sending Mail” (page 147).

Sending Mail

Now that you have entered information about how you plan to get mail, Evolution needs to know about how you want to send it.

- Select a server type from the *Server Type* list.

  The following server types are available:

  Sendmail: Uses the Sendmail program to send mail from your system. Sendmail is more flexible, but is not as easy to configure, so you should select this option only if you know how to set up a Sendmail service.

  SMTP: Sends mail using an outbound mail server. This is the most common choice for sending mail. If you choose SMTP, there are additional configuration options.

SMTP Configuration

1. Type the host address in the *Host* field.

If you are unsure what your host address is, contact your system administrator.

2 Select if your server requires authentication.

If you selected that your server requires authentication, you need to provide the following information:

a Select your authentication type in the *Authentication* list.

or

Click *Check for Supported Types* to have Evolution check for supported types. Some servers do not announce the authentication mechanisms they support, so clicking this button is not a guarantee that available mechanisms actually work.

b Type your username in the *Username* field.

c Select if you want Evolution to remember your password.

3 Select if you use a secure connection (SSL).

4 Click *Forward*.

Continue with Section "Account Management" (page 148).

Account Management

Now that you have finished the e-mail configuration process you need to give the account a name. The name can be any name you prefer. Type your account name on the *Name* field, then click *Forward*.

Continue with Section "Time Zone" (page 148).

Time Zone

In this step, you need to select your time zone either on the map or select from the time zone drop-down list.

When you have finished, click *Forward*, then click *Apply*. Evolution opens with your new account created.

If you want to import e-mail from another e-mail client, continue with Section "Importing Mail (Optional)" (page 149). If not, skip to Section 4.2, "Using Evolution: An Overview" (page 149).

Importing Mail (Optional)

If Evolution finds e-mail or address files from another application, it offers to import them.

Microsoft Outlook* and versions of Outlook Express after version 4, use proprietary formats that Evolution cannot read or import. To import information, you might want to use the Export tool under Windows*.

Before importing e-mail from Netscape*, make sure you have selected *File → Compact All Folders*. If you don't, Evolution will import and undelete the messages in your Trash folders.

NOTE

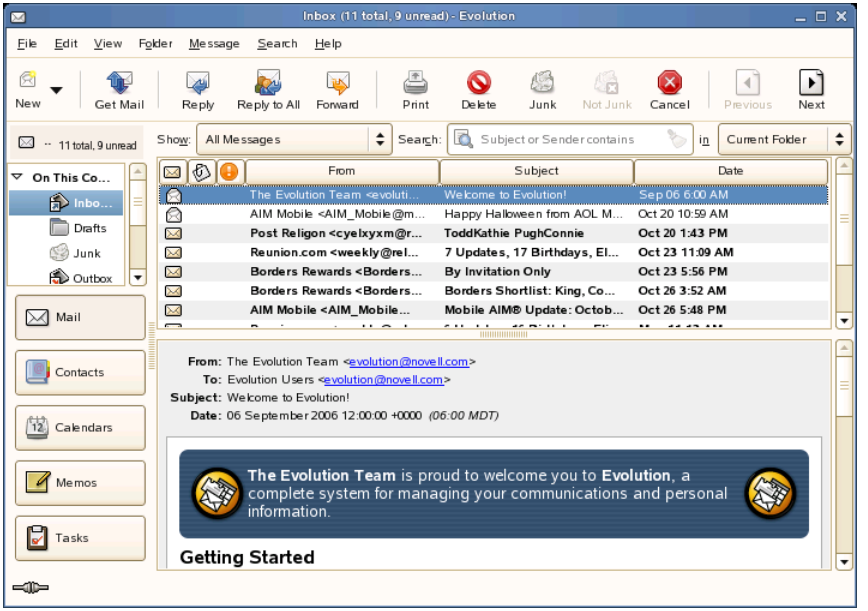
Evolution uses standard file types for e-mail and calendar information, so you can copy those files from your `~/.evolution` directory. The file formats used are `mbox` for e-mail and `iCal` for calendar information.

Contacts files are stored in a database, but can be saved as a standard vCard*. To export contact data, open your contacts tool and select the contacts you want to export (press Ctrl + A to select them all). Click *File → Save as VCard*.

4.2 Using Evolution: An Overview

Now that the first-run configuration has finished, you're ready to begin using Evolution. Here's a quick explanation of what's happening in your main Evolution window.

Figure 4.1 *Evolution Window*


Inbox (11 total, 9 unread) - Evolution
File Edit View Folder Message Search Help
New Get Mail Reply Reply to All Forward Print Delete Junk Not Junk Cancel Previous Next
11 total, 9 unread
Show: All Messages
Search: Subject or Sender contains
in Current Folder
On This Co...
Inbo...
Drafts
Junk
Outbox
From Subject Date
The Evolution Team <evoluti... Welcome to Evolution! Sep 06 6:00 AM
AIM Mobile <AIM_Mobile@m... Happy Halloween from AOL M... Oct 20 10:59 AM
Post Religon <cyelxyxm@r... ToddKathie PughConnie Oct 20 1:43 PM
Reunion.com <weekly@rel... 7 Updates, 17 Birthdays, El... Oct 23 11:09 AM
Borders Rewards <Borders... By Invitation Only Oct 23 5:56 PM
Borders Rewards <Borders... Borders Shortlist: King, Co... Oct 26 3:52 AM
AIM Mobile <AIM_Mobile... Mobile AIM® Update: Octob... Oct 26 5:48 PM
Mail
Contacts
Calendars
Memos
Tasks
From: The Evolution Team <evolution@novell.com>
To: Evolution Users <evolution@novell.com>
Subject: Welcome to Evolution!
Date: 06 September 2006 12:00:00 +0000 (06:00 MDT)
The Evolution Team is proud to welcome you to Evolution, a complete system for managing your communications and personal information.
Getting Started

Menu Bar

The menu bar gives you access to nearly all of Evolution features.

Folder List

The folder list gives you a list of the available folders for each account. To see the contents of a folder, click the folder name and the contents are displayed in the e-mail list.

Toolbar

The toolbar gives you fast and easy access to the frequently used features in each component.

Search Tool

The search tool lets you search your e-mail, contacts, calendar, and tasks to easily find what you're looking for.

Message List

The message list displays a list of e-mail that you have received. To view an e-mail in the preview pane, click the e-mail in the e-mail list.

Shortcut Buttons

The shortcut bar lets you switch between folders and between Evolution tools. At the bottom of the shortcut bar there are buttons that let you switch tools, and above that is a list of all the available folders for the current tool. If you have the Evolution Connector for Microsoft Exchange installed, you have an Exchange button in addition to buttons for the other tools.

Status Bar

The status bar periodically displays a message, or tells you the progress of a task. This most often happens when you're checking or sending e-mail. These progress queues are shown in the previous figure. The Online/Offline indicator is here, too, in the lower left of the window.

Preview Pane

The preview pane displays the contents of the e-mail that is selected in the e-mail list.

4.2.1 The Menu Bar

The menu bar's contents always provide all the possible actions for any given view of your data. If you're looking at your Inbox, most of the menu items relate to e-mail.

Some content relates to other components of Evolution and some, especially those in the File menu, relates to the application as a whole.

File: Anything related to a file or to the operations of the application usually falls under this menu, such as creating things, saving them to disk, printing them, and quitting the program itself.

Edit: Holds useful tools that help you edit text and move it around. Lets you access the settings and configuration options in the Edit menu.

View: Lets you decide how Evolution should look. Some of the features control the appearance of Evolution as a whole, and others the way a particular kind of information appears.

Folder: Holds actions that can be performed on folders. You can find things like copy, rename, delete, and so on.

Message: Holds actions that can be applied to a message. If there is only one target for the action, such as replying to a message, you can normally find it in the Message menu.

Search: Lets you search for messages, or for phrases within a message. You can also see previous searches you have made. In addition to the Search menu, there is a text entry box in the toolbar that you can use to search for messages. You can also create a search folder from a search.

Help: Opens the Evolution Help files.

4.2.2 The Shortcut Bar

Evolution's most important job is to give you access to your information and help you use it quickly. One way it does that is through the shortcut bar, which is the column on the left side of the main window. The buttons, such as Mail and Contacts, are the shortcuts. Above them is a list of folders for the current Evolution tool.

The folder list organizes your e-mail, calendars, contact lists, and task lists in a tree, similar to a file tree. Most people find one to four folders at the base of the tree, depending on the tool and their system configuration. Each Evolution tool has at least one, called On This Computer, for local information. For example, the folder list for the e-mail tool shows any remote e-mail storage you have set up, plus local folders and search folders.

If you get large amounts of e-mail, you might want more folders than just your Inbox. You can create multiple calendar, task, or contacts folders.

To create a new folder:

1. Click *Folder* → *New*.
2. Type the name of the folder in the *Folder Name* field.
3. Select the location of the new folder.
4. Click *OK*.

Folder Management

Right-click a folder or subfolder to display a menu with the following options:

Copy: Copies the folder to a different location. When you select this item, Evolution offers a choice of locations to copy the folder to.

Move: Moves the folder to another location.

Mark Messages As Read: Marks all the messages in the folder as read.

New Folder: Creates another folder in the same location.

Delete: Deletes the folder and all its contents.

Rename: Lets you change the name of the folder.

Disable: Disables the account.

Properties: Checks the number of total and unread messages in a folder, and, for remote folders, lets you select whether to copy the folder to your local system for offline operation.

You can also rearrange folders and messages by dragging and dropping them.

Any time new e-mail arrives in a e-mail folder, that folder label is displayed in bold text, along with the number of new messages in that folder.

4.2.3 E-Mail

Evolution e-mail is like other e-mail programs in several ways:

- It can send and receive e-mail in HTML or as plain text, and makes it easy to send and receive multiple file attachments.
- It supports multiple e-mail sources, including IMAP, POP3, and local mbox or mh spools and files created by other e-mail programs.
- It can sort and organize your e-mail in a wide variety of ways with folders, searches, and filters.
- It lets you guard your privacy with encryption.

However, Evolution has some important differences from other e-mail programs. First, it's built to handle very large amounts of e-mail. The junk e-mail, message filtering and searching functions were built for speed and efficiency. There's also the search folder, an advanced organizational feature not found in some e-mail clients. If you get a lot of e-mail, or if you keep every message you get in case you need to refer to it later, you'll find this feature especially useful. Here's a quick explanation of what's happening in your main Evolution e-mail window.

Message List

The message list displays all the e-mails that you have. This includes all your read and unread messages, and e-mail that is flagged to be deleted.

Preview Pane

This is where your e-mail is displayed.

If you find the preview pane too small, you can resize the pane, enlarge the whole window, or double-click the message in the message list to have it open in a new window. To change the size of a pane, drag the divider between the two panes.

As with folders, you can right-click messages in the message list and get a menu of possible actions, including moving or deleting them, creating filters or search folders based on them, and marking them as junk mail.

Most of the e-mail-related actions you want to perform are listed in the Actions menu in the menu bar. The most frequently used ones, like Reply and Forward, also appear as buttons in the toolbar. Most of them are also located in the right-click menu and as keyboard shortcuts.

4.2.4 The Calendar

To begin using the calendar, click Calendar in the shortcut bar. By default, the calendar shows today's schedule on a ruled background. At the upper right, there's a monthly calendar you can use to switch days. Below that, there's a Task list, where you can keep a list of tasks separate from your calendar appointments.

Appointment List

The appointment list displays all your scheduled appointments.

Month Pane

The month pane is a small view of a calendar month. To display additional months, drag the column border to the left. You can also select a range of days in the month pane to display a custom range of days in the appointment list.

Task List

Tasks are distinct from appointments because they generally don't have times associated with them. You can see a larger view of your task list by clicking Tasks in the shortcut bar.

4.2.5 The Contacts Tool

The Evolution contacts tool can handle all of the functions of an address book or phone book. However, it's easier to update Evolution than it is to change an actual paper book, in part because Evolution can synchronize with Palm OS* devices and use LDAP directories on a network.

Another advantage of the Evolution contacts tool is its integration with the rest of the application. For example, you can right-click on an e-mail address in Evolution mail to instantly create a contact entry.

To use the contacts tool, click *Contacts* in the shortcut bar. By default, the display shows all your contacts in alphabetical order, in a minicard view. You can select other views from the *View* menu, and adjust the width of the columns by clicking and dragging the gray column dividers.

The largest section of the contacts display shows a list of individual contacts. You can also search the contacts in the same way that you search e-mail folders, using the search tool on the right side of the toolbar.

5 Instant Messaging with Gaim

Use Gaim to use all of your instant messaging accounts from a single instant messaging client. Gaim supports all of the most popular instant messaging protocols, so you can log in to all of your accounts at once and chat live with your contacts in one tabbed interface, regardless of which IM system they use.

This chapter explains the Gaim options you need to know about to set up Gaim and communicate with your contacts. It does not explain all of Gaim's features and options. For more information, open Gaim, then click *Help* → *Online Help* or press F1.

- Section 5.1, "Supported Protocols" (page 157)
- Section 5.2, "Setting Up an Account" (page 158)
- Section 5.3, "Managing Your Buddy List" (page 159)
- Section 5.4, "Chatting" (page 160)

5.1 Supported Protocols

Gaim supports the following instant messaging protocols:

- AIM/ICQ
- Gadu-Gadu
- GroupWise

- IRC
- Jabber
- MSN
- Napster
- Yahoo
- Zephyr

5.2 Setting Up an Account

To use Gaim, you must already have accounts on the systems you want to use. For example, to use Gaim for your AIM account, you must first have an AIM account. Once you have those accounts, set them up in the Gaim *Add Account* dialog.

1. Start Gaim by clicking *Computer* → *More Applications* → *Communicate* → *Gaim*.
2. Click *Accounts* → *Add* to open the *Add Account* dialog.

   The first time you run Gaim, or any subsequent times you start Gaim when you don't have any accounts set up, the *Add Account* dialog opens automatically.
3. Choose the protocol you want to set up.

   The *Add Account* dialog differs for each protocol, depending on what setup options are available for that protocol.
4. Enter the setup options for the chosen protocol.

   Typical options include your account name and password. Your protocol might support additional options, such as a buddy icon, alias, login options, or others.
5. Click *Save*.
6. Repeat Step 2 to Step 5 for each additional protocol.

Once an account is added, you can log in to that account by entering your account name and password in the Gaim *Login* dialog.

5.3 Managing Your Buddy List

Use the Buddy List to manage your contacts, also known as buddies. You can add and remove buddies from your Buddy List, and you can organize your buddies in groups so they are easy to find.

5.3.1 Displaying Buddies in the Buddy List

Once your accounts are set up, all buddies who are online appear in your Buddy List. If you also want your buddies who are not online to appear in the Buddy List, click *Buddies → Show Offline Buddies*.

5.3.2 Adding a Buddy

To add a buddy to your Buddy List, click *Buddies → Add Buddy*, then enter the information about that buddy.

NOTE

For some protocols, you cannot add a buddy in the Gaim interface. You must use the client for those protocols if you want to add to your buddy list. After you have added a buddy in the protocol's client, that buddy appears in your Gaim Buddy List.

5.3.3 Removing a Buddy

To remove a buddy, right-click on that buddy's name in the Buddy List, then click *Remove*.

5.4 Chatting

To open a chat session, double-click a buddy name in the Buddy List. The Chat screen opens. Type your message, then press *Enter* to send it.

Each chat session you open appears as a tab in the Chat screen. Click on a buddy's tab to chat with that buddy. Close a chat session by closing the tab for that buddy.

6 Using Voice over IP with Ekiga

Modern telecommunication means far more than just doing a phone call. It is also about exchanging text messages and sometimes even video conferencing. Roaming enables you to be reachable under one phone number all across the world. Ekiga brings these features to your Linux desktop allowing you to communicate over broadband Internet.

Before you start, make sure the following requirements are met:

- Your sound card is properly configured.
- A headset or a microphone and speakers are attached to your computer.
- For dialing in to regular phone networks you have created a SIP account. For a list of providers refer to http://www.voipproviderslist.com/. Free trials are provided by http://www.voipbuster.com.
- For video conferencing you have attached a Web cam to your computer.

6.1 Configuring Ekiga

On first start, Ekiga comes up with a configuration assistant that requests you to enter all data needed to configure your instance of Ekiga. To configure Ekiga, proceed as follows:

1. Enter your user name (name and surname).
2. Enter your `ekiga.net` account data or choose not to sign up to `ekiga.net`.

   To add other accounts later on, configure them using *Edit* → *Accounts*.
3. Determine your connection type.
4. Determine the type of firewall to use to enable you to perform calls with Ekiga.
5. Choose the audio manager to use. Accept the default setting *ALSA*, as other sound systems like OSS are not available on openSUSE.
6. Choose the audio input and output devices and test your settings.
7. Accept the video manager selection, *V4L*.
8. Choose the video input device and test your settings.
9. Check the summary of your settings and apply them.

Ekiga allows you to maintain multiple accounts. To configure an additional account, proceed as follows:

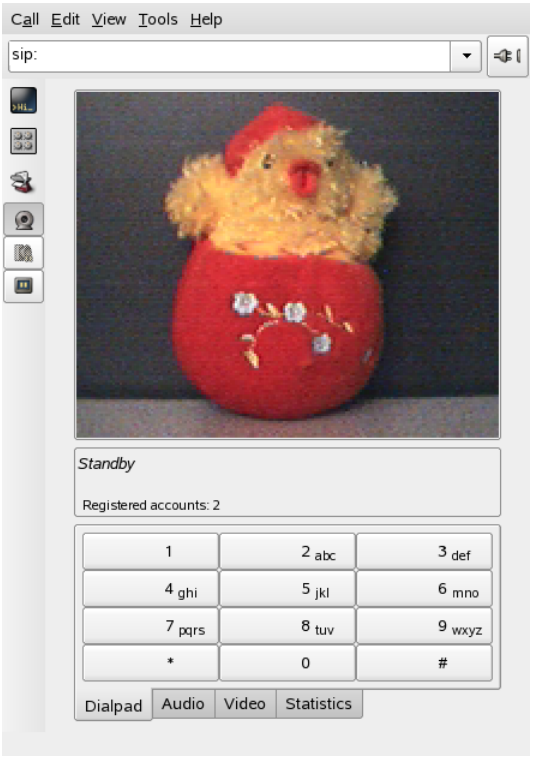
1. Open *Edit* → *Accounts* and select *Add*.
2. Choose an *Account Name*.
3. Select an appropriate *Protocol* depending on what type of account you use. Normally, you would select *SIP* here.
4. Enter *Registrar*, *User* and *Password* according to the data provided by your provider.
5. Leave the configuration dialog with *OK* and activate the account.

   The status of your account displayed in the Ekiga main window changes to *Registered*.

6.2 The Ekiga User Interface

All functions of Ekiga are available via the menu bar. Shortcuts to the most important functions are provided by means of a toolbar to the left and by special key combinations.

Figure 6.1 *Ekiga User Interface*



The user interface has different modes. To switch between views, use *View → View Mode* and *View → Control Panel* or select the *view mode* icon on the left side of the GUI and the different tabs at the bottom. The *Full View* is shown in Figure 6.1, "Ekiga User Interface" (page 163). All icons in the toolbar provide a tool tip that is activated on hovering over the icon with your mouse pointer.

At the bottom of the user interface, several tabs provide the functionality for *Dialpad*, *Audio*, *Video* and *Statistics*. Some settings like the *Audio* settings may only be changed during a phone call.

Many of functions of Ekiga are available via keyboard shortcuts. Table 6.1, "Keyboard Shortcuts for Ekiga" (page 164) summarizes the most important ones.

Table 6.1 *Keyboard Shortcuts for Ekiga*

Ctrl Sequence	Description
Ctrl + O	Initiate a call with the current number.
Ctrl + D	Hang up.
Ctrl + G	Hold the current call.
Ctrl + T	Transfer the current call to another party.
Ctrl + S	Save the current picture to hard disk.
Ctrl + W	Close the Ekiga user interface.
Ctrl + Q	Quit Ekiga.
Ctrl + E	Start the Accounts manager.
Ctrl + P	Open the *Ekiga Preferences* overview. This dialog allows you to do some fine-tuning to your Ekiga settings.
Ctrl + +	Zoom in to the picture of the Web cam.
Ctrl + -	Zoom out or the picture of the Web cam.
Ctrl + =	Return to the normal size of the Web cam display.
Ctrl + F	Use full screen for the Web cam.
Ctrl + H	Display the history of your calls.

6.3 Making a Call

Once Ekiga is configured appropriately, making a call is straightforward.

1. Start Ekiga using the menu or the command line.

2. Enter the SIP address of the other party at the *SIP address* prompt. The address should look like `sip:username@domainname` or `username@hostname` for direct local calls or like `username@sipserver` or `userid@sipserver` for proxied calls or calls using the service of a SIP provider. If you have a SIP provider that accepts real phone calls, you may just enter the number like `sip:<call number>`

3. Click *Call* or type Ctrl + O and wait for the other party to pick up the phone.

4. Once you are done or wish to end the call, click *Hang up* or type Ctrl + D.

If you need to tweak the sound parameters during a call, click *View → View Mode → Full View* to show four tabs holding more options. The second one holds the *Audio* options for *Playback level* and *Recording level*. Use the sliders to adjust both volumes to fit your needs.

6.4 Answering a Call

Ekiga can receive calls in two different ways. First, the user may be called directly with `sip:user@host`. Alternatively, make your calls via a SIP provider. Most SIP providers enable you to get calls from a normal land line to your VoIP account. Depending on the mode Ekiga is run, there are several ways in which you would notice an incoming call:

Normal Application
: Incoming calls can only be received and answered if Ekiga is already running. You hear the ring sound on your headset or your speakers. If Ekiga is not running, the call cannot be received.

Panel Applet
: Normally, the Ekiga panel applet would run silently without giving any notice of its existence. This changes as soon as a call comes in. The main window of Ekiga opens and you hear a ring sound on your headset or speakers.

Once you have noticed an incoming call, just click *Accept* to pick up the phone and start talking. If you do not want to accept this call, click *Reject*. It is also possible to transfer the call to another SIP address.

6.5 Using the Address Book

Ekiga offers to manage your SIP contacts. Start the address book with *Tools → Address book*. An empty list window opens. To add a contact, First select *Personal* with your mouse. Then right-click into the address window and select *New Contact*. Alternatively, just press *Ctrl → N*.

The following entries need to be made for a valid contact:

Name
: Enter the name of your contact. This may be a full name, but you can also use a nickname here.

SIP Address
: Enter a valid SIP address for your contact.

Email
: Enter the e-mail address of your contact for your own reference.

Speed Dial
: With a `Speed Dial` you may access often used numbers more easily. However, this is optional as well.

Categories
: Add your own categories if you have many different contacts.

Local Address Book
: By default, you have a local address book with the name *Personal* available. If you need more address books, create them with *File → New Address Book* or use the keyboard shortcut Ctrl + B.

To call any contact from the address book, double-click this contact with the mouse. The call will be directly initiated.

6.6 For More Information

The official home page of Ekiga is http://www.ekiga.org/. This site offers the frequently asked questions as well as a more detailed documentation.

For information about the support of the H323 teleconferencing protocol in Linux, see http://www.openh323.org/. This is also a good starting point when searching for projects supporting VoIP.

If you intend to set up your private telephone network, you might be interested in the PBX software Asterisk http://www.asterisk.org/. Information about this project can also be found at http://www.voip-info.org/wiki-Asterisk.

Part III. Internet

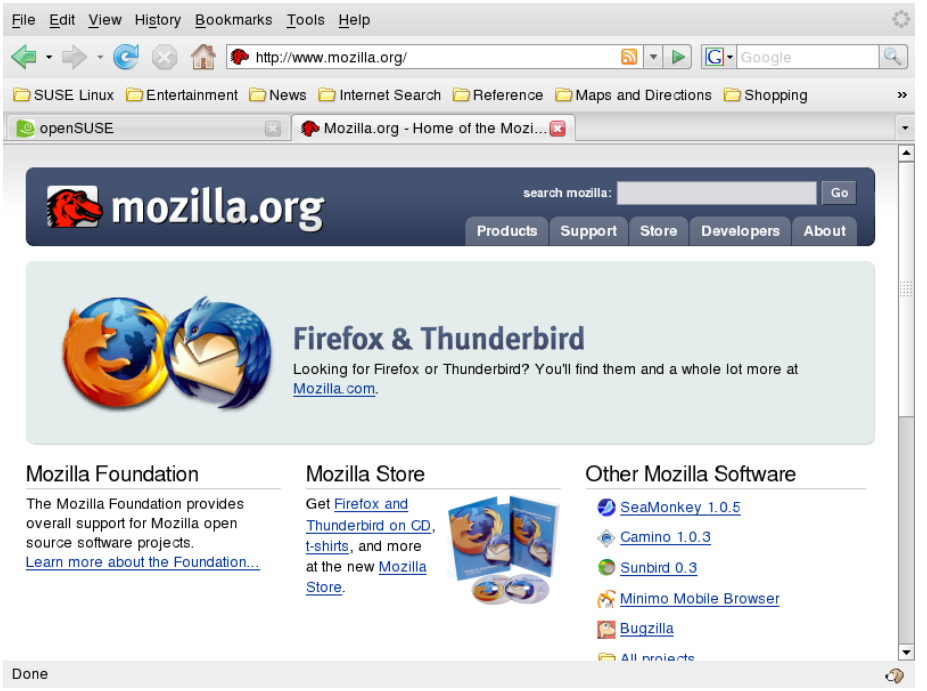
7 Browsing with Firefox

Included with your openSUSE™ is the Mozilla Firefox Web browser. With features like tabs, pop-up window blocking, and download and image management, Firefox combines the latest Web technologies. You can view more than one Web page in a single window. You can suppress annoying advertisements and disable images that only slow you down. Its easy access to different search engines helps you find the information you need. Start the program from the main menu or by entering the command `firefox`. The main program features are described in the following sections.

7.1 Navigating Web Sites

Firefox has much the same look and feel as other browsers. It is shown in Figure 7.1, "The Browser Window of Firefox" (page 172). The navigation toolbar includes *Forward* and *Back* and a location bar for a Web address. Bookmarks are also available for quick access. For more information about the various Firefox features, use the *Help* menu.

Figure 7.1 *The Browser Window of Firefox*



7.1.1 Tabbed Browsing

If you often use more than one Web page at a time, tabbed browsing may make it easier to switch between them. Load Web sites in separate tabs within one window.

To open a new tab, select *File → New Tab*. This opens an empty tab in the Firefox window. Alternatively, right-click a link and select *Open link in new tab*. Right-click the tab itself to access more tab options. You can create a new tab, reload one or all existing tabs, or close them. You can also change the sequence of the tabs by dragging and dropping them on a requested position.

7.1.2 Using the Sidebar

Use the left side of your browser window for viewing bookmarks or the browsing history. Extensions may add new ways to use the sidebar as well. To display the Sidebar, select *View* → *Sidebar* and select the desired contents.

7.2 Finding Information

There are two ways to find information in Firefox: the search bar and the find bar. The search bar looks for pages while the find bar looks for things on the current page.

7.2.1 Finding Information on the Web

Firefox has a search bar that can access different engines, like Google, Yahoo, or Amazon. For example, if you want to find information about openSUSE using the current engine, click in the search bar, type `openSUSE`, and hit Enter. The results appear in your window. To choose your search engine, click the icon in the search bar. A menu opens with a list of available search engines.

7.2.2 Installing a Different Search Engine

If you favorite search engine is not listed, Firefox gives you the possibility to configure it. Try the following steps:

1. Establish an Internet connection first.
2. Click in the search bar on the icon.
3. Select *Add Engines* from the menu.
4. Firefox displays a Web page with available search engines. It is also sorted by categories. You can choose from Wikipdedia, Leo, and others. Click the desired search plug-in.
5. Install your search plug-in with *Ok* or abort with *Cancel*.

7.2.3 Searching in the Current Page

To search inside a Web page, click *Edit* → *Find in This Page* or press Ctrl + F. The find bar opens. Usually, it is displayed at the bottom of a window. Type your query in the input field. Firefox finds the first occurence of this phrase. You can find other occurences of the phrase by pressing F3 or *Find Next* button in the find bar. You can also highlight all occurences by pressing the *Highlight all* button.

7.3 Managing Bookmarks

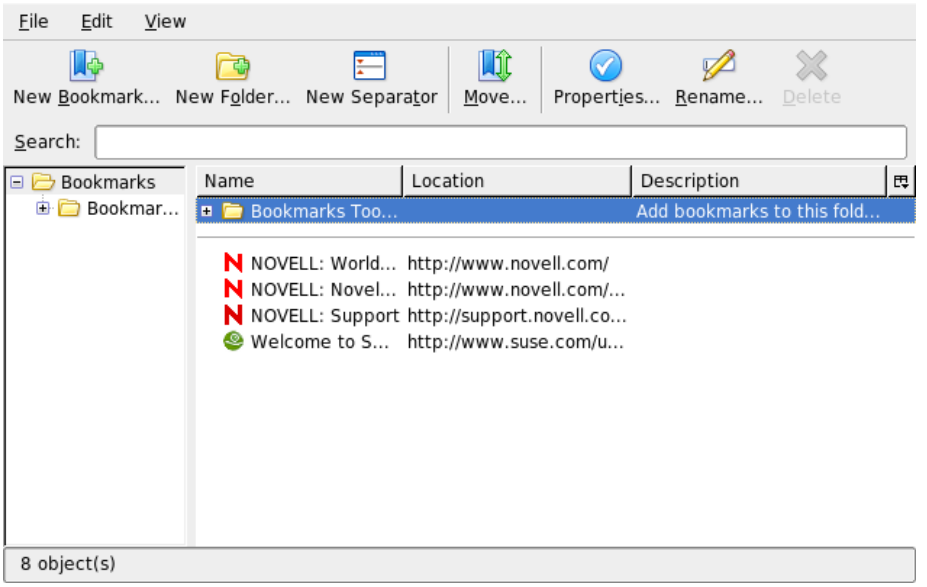
Bookmarks offer a convenient way of saving links to your favorite Web sites. To add the current Web site to your list of bookmarks, click *Bookmarks* → *Bookmark This Page*. If your browser currently displays multiple Web sites on tabs, only the URL on the currently selected tab is added to your list of bookmarks.

When adding a bookmark, you can specify an alternative name for the bookmark and select a folder where Firefox should store it. To bookmark Web sites on multiple tabs, select *Bookmark All Tabs*. Firefox creates a new folder that includes bookmarks of each site displayed on each tab. To remove a Web site from the bookmarks list, click *Bookmarks*, right-click the bookmark in the list, then click *Delete*.

7.3.1 Using the Bookmark Manager

The bookmark manager can be used to manage the properties (name and address location) for each bookmark and organize the bookmarks into folders and sections. It resembles Figure 7.2, “Using the Firefox Bookmark Manager” (page 175).

Figure 7.2 *Using the Firefox Bookmark Manager*



To open the bookmark manager, click *Bookmark* → *Manage Bookmarks*. A window opens and displays your bookmarks. With *New Folder*, create a new folder with a name and a description. If you need a new bookmark, click *New Bookmark*. This lets you insert the name, location, keywords, and also a description. The keyword is a shortcut to your bookmark. If you need your newly created bookmark in the sidebar, check *Load this bookmark in the sidebar*.

7.3.2 Importing Bookmarks from Other Browsers

If you used a different browser in the past, you probably want to use your preferences and bookmarks in Firefox, too. At the moment, you can import from Netscape 4.x, 6, 7, Mozilla 1.x, and Opera.

To import your settings, click *File* → *Import*. Select the browser from which to import settings. After you click *Next*, your settings are imported. Find your imported bookmarks in a newly created folder, beginning with `From`.

7.3.3 Live Bookmarks

Live bookmarks display headlines in your bookmark menu and keep you up to date with the latest news. This enables you to save time with one glance at your favorite sites.

Many sites and blogs support this format. A Web site indicates this by showing an orange icon in the right part of the location bar. Click it and choose *Add NAME OF THE FEED as Live Bookmark*. A dialog box opens where you can select the name and location of your live bookmark. Confirm with *Add*.

Some sites do not tell Firefox that they support a news feed, although they actually do. To add a live bookmark manually, you need the URL of the feed. Do the following:

Procedure 7.1 *Adding a Live Bookmark Manually*

1. Open the bookmark manager with *Bookmarks* → *Manage Bookmarks*. A new window opens.
2. Select *File* → *New Live Bookmark*. A dialog box opens.
3. Insert a name for the live bookmark and add your URL in the *Feed Location*, for example, `http://www.novell.com/newsfeeds/rss/coolsolutions.xml`. Firefox updates your live bookmarks.
4. Close your bookmark manager.

7.4 Using the Download Manager

With the help of the download manager, keep track of your current and past downloads. To open the download manager, click *Tools* → *Downloads*. Firefox opens a window with your downloads. While downloading a file, see a progress bar and the current file. If necessary, pause a download and resume it later. To open a downloaded file, click *Open*. With *Remove*, remove it from the list. If you need information about the file, right-click the filename and choose *Properties*.

If you need further control of the download manager, open the configuration window from *Edit → Preferences* and go to the *Downloads* tab. Here, determine the download folder, how the manager behaves, and some configuration of file types.

7.5 Customizing Firefox

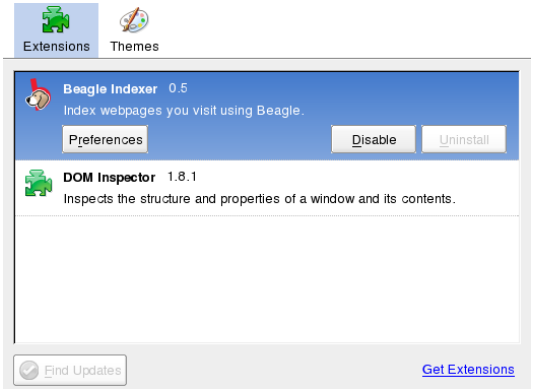
Firefox can be customized extensively. You can install extensions, change themes, and add smart keywords for your online searches.

7.5.1 Extensions

Mozilla Firefox is a multifunctional application, which means that you can download and install add-ons, known as extensions. For example, add a new download manager and mouse gestures. This has the advantage that Firefox itself stays small and unbloated.

To add an extension, click *Tools → Extensions*. In the bottom-right corner, click *Get More Extensions* to open the Mozilla extensions update Web page where you can choose from a variety of available extensions. Click the extension to install then click the install link to download and install it. When you restart Firefox, the new extension is functional. You can also look at the various extensions at `http://addons.mozilla.org/`
.

Figure 7.3 *Installing Firefox Extensions*



7.5.2 Changing Themes

If you do not like the standard look and feel of Firefox, install a new *theme*. Themes do not change the functionality, only the appearance of the browser. When installing a theme, Firefox asks for confirmation first. Allow the installation or cancel it. After a successful installation, you can enable the new theme.

1. Click *Tools* → *Themes*.

2. In the new dialog that appears, click *Get More Themes*. If you already installed a theme, find it in the list, as in Figure 7.4, "Installing Firefox Themes" (page 178).

Figure 7.4 *Installing Firefox Themes*

3. A new window appears with the Web site `https://addons.mozilla.org`.

4. Choose a theme and click *Install Now*.

5. Confirm the download and installation.

6. After downloading the theme, a dialog appears and informs you about your list of themes. Activate the new theme with *Use Theme*.

7. Close the window and restart Firefox.

If a theme is installed, you can always switch to a different theme without restarting by clicking *Tools* → *Themes* then *Use Theme*. If you do not use a theme anymore, you can delete it in the same dialog with *Uninstall*.

7.5.3 Adding Smart Keywords to Your Online Searches

Searching the Internet is one of the main tasks a browser can perform for you. Firefox lets you define your own *smart keywords*: abbreviations to use as a "command" for searching the Web. For example, if you use Wikipedia often, use a smart keyword to simplify this task:

1. Go to `http://en.wikipedia.org`.
2. After Firefox displays the Web page, see the search text field. Right-click it then choose *Add a Keyword for this Search* from the menu that opens.
3. The *Add Bookmark* dialog appears. In *Name*, name this Web page, for example, *Wikipedia (en)*.
4. For *Keyword*, enter your abbreviation of this Web page, for example, *wiki*.
5. With *Create in*, choose the location of the entry in your bookmarks section. You can put it into *Quick Searches*, but any other level is also appropriate.
6. Finalize with *Add*.

You have successfully generated a new keyword. Whenever you need to look into Wikipedia, you do not have to use the entire URL. Just type `wiki Linux` to view an entry about Linux.

7.6 Printing from Firefox

Configure the way Firefox prints the content it displays using the *Page Setup* dialog. Click *File → Page Setup* then go to the *Format & Options* tab to select the orientation of your print jobs. You can scale or make it adjust automatically. To print a background, select *Print Background (colors & images)*. Click the *Margins & Header/Footer* tab to adjust margins and select what to include in the headers and footers.

After you configured your settings, print a Web page with *File → Print*. Select the printer or a file in which to save the output. With *Properties*, set the paper size, specify the print command, choose grayscale or color, and determine the margins. When satisfied with your settings, approve with *Print*.

7.7 For More Information

Get more information about Firefox from the official home page at `http://www.mozilla.com/firefox/`. Refer to the integrated help to find out more about certain options or features.

Part IV. Multimedia

Managing Your Digital Image Collection

8

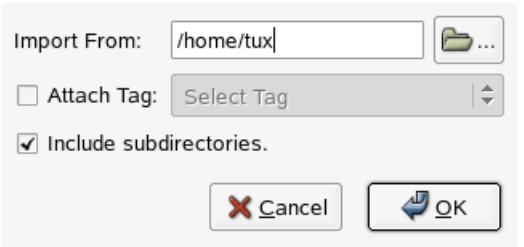
f-spot is a management tool for your collection of digital images tailored for the GNOME desktop. It allows you to assign different tags to your images in order to categorize them and offers various neat image editing options.

The first time you run f-spot, tell it where to find the images to import to your f-spot collection. If you already have a collection of images stored on your hard drive, enter the path to the respective directory and optionally include subfolders. f-spot imports these images into its database.

TIP

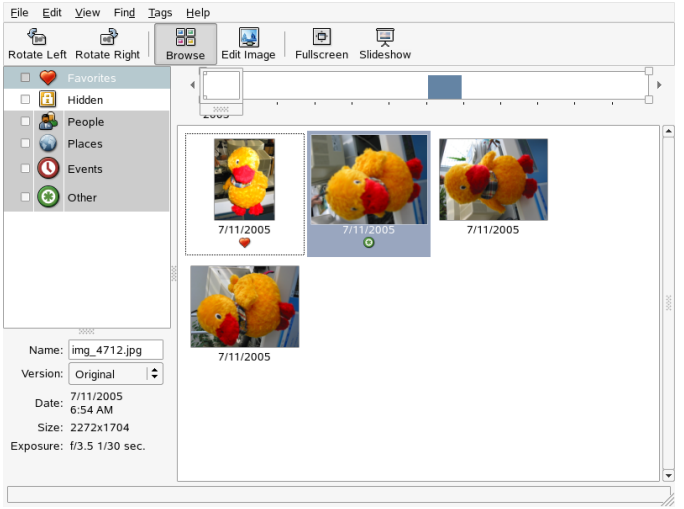
If all the images you are importing belong to the same category, you can attach the appropriate tag on import. Select *Attach Tag* and choose the matching tag from the drop down menu.

Figure 8.1 *Importing Images to f-spot*



f-spot's main window is divided into three main areas. Categories, tags, and detailed information for the selected images are displayed in a sidebar to the left and a thumbnails of all images bearing the selected tag or category or, if none is selected, the entire collection is displayed in the right part of the window.

Figure 8.2 *f-spot Main Window*



A menu bar right at the top of the window allows you to access the main menus. A toolbar below offers several different functions depicted by a matching icon:

Table 8.1 *f-spot Toolbar*

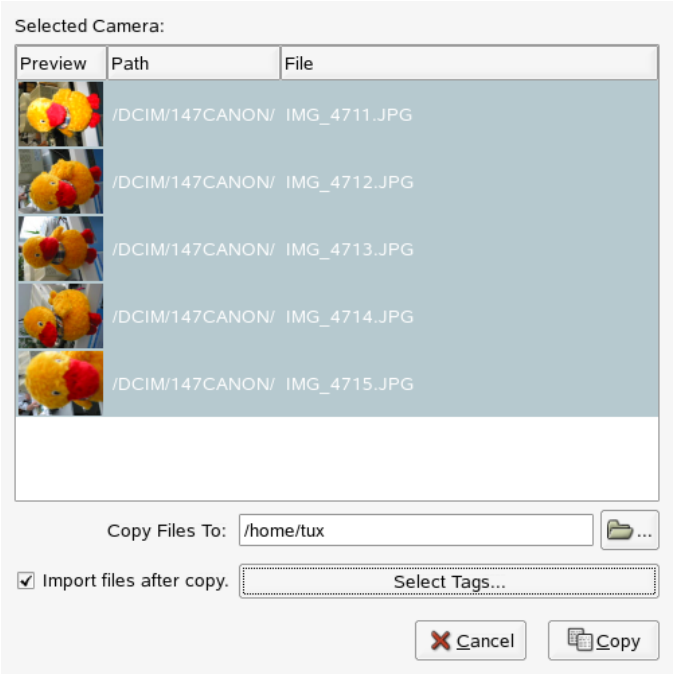
Icon	Description
Rotate (Left or Right)	Use this shortcut to change an image's orientation.
Browse	The Browse mode allows you to view and search you entire collection or tagged subsets of it. You can also use the time line to search images by creation date.
Edit Image	This mode allows you to select one image and do some basic image processing. Details are available in Section 8.6, "Basic Image Processing with f-spot" (page 189).

Icon	Description
Fullscreen	Switch to fullscreen display mode.
Slideshow	Start a slide show.

8.1 Downloading Pictures from Your Camera

Import new images from your digital camera connected to the USB port of your computer using *FileImport from Camera*. The type of camera is detected automatically.

Figure 8.3 *Import from Camera*



f-spot launches a preview window displaying all the images that are available for download from camera. The files are copied to the target directory specified via *Copy Files to*. If *Import files after copy* is selected, all images copied from camera are automatically imported to f-spot's database. Tagging can be done on import, if you select the appropriate tag with *Select Tags*. If you do not want to import all images on your camera to your database, just deselect the unwanted one in the preview window.

8.2 Getting Information

Once you select an image, some basic statistical information on this image is displayed in the lower left part of the window. This includes the filename, its version (copy or original image), the date of creation, its size and the exposure which was used in creating this particular image. View the EXIF data associated with the image file with *ViewEXIF Data*.

8.3 Managing Tags

Use tags to categorize any of your images to create manageable subsets of your collection. If, for example, you would like to get some sort of order in your collection of portrait shots of your loved ones, proceed like this:

1. Select the *Browse* mode of f-spot.

2. In the left frame of the f-spot window, select the *People* category, right-click it, then choose *Create New Tag*. The new tags then appear as subcategories below the *People* category:

   a. Create a new tag called `Friends`.

   b. Create a new tag called `Family`.

3. Now attach tags to images or groups of selected images. Right-click an image, choose *Attach Tag*, and select the appropriate tag for this image. To attach a tag to a group of images, click the first one then press Shift and select the other ones without releasing the Shift key. Right-click for the tag menu and select the matching category.

After the images have been categorized, you can browse your collection by tag. Just check *People → Family* and the displayed collection is limited to the images tagged `Family`. Searching your collection by tag is also possible through *Find → Find by Tag*. The result of your search is displayed in the thumbnail overview window.

Removing tags from single images or groups of images works similarly to attaching them. The tag editing functions are also accessible via the *Tags* menu in the top menu bar.

8.4 Search and Find

As mentioned in Section 8.3, "Managing Tags" (page 186), tags can be used as a means to find certain images. Another way, which is quite unique to f-spot, is to use the *Timeline* below the toolbar. By dragging the little frame along this time line, limit the images displayed in the thumbnail overview to those taken in the selected time frame. f-spot starts with a sensibly chosen default time line, but you can always edit the time span by moving the sliders to the right and left ends of the time line.

8.5 Exporting Image Collections

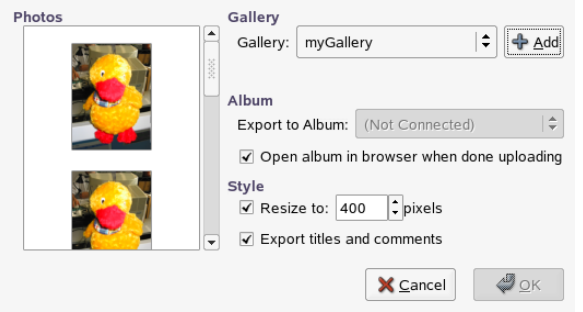
f-spot offers a range of different export functions for your collections under *FileExport*. Probably the most often used of these are *Export to Web Gallery* and *Export to CD*.

To export a selection of images to a web gallery, proceed as follows:

1. Select the images to export.

2. Click *File → Export → Export to Web Gallery* and select a gallery to which to export your images or add a new one. f-spot establishes a connection to the Web location entered for your web gallery. Select the album to which to export the images and decide whether to scale the images automatically and export titles and comments.

Figure 8.4 *Exporting Images to a Web Gallery*



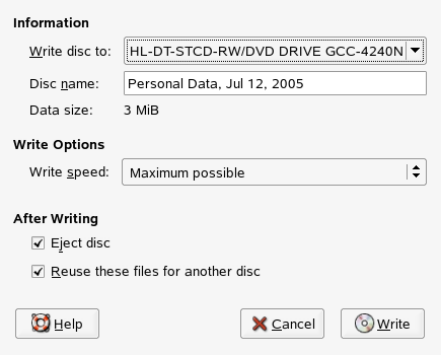
To export a selection of images to CD, proceed as follows:

1. Select the images to export.

2. Click *File* → *Export* → *Export to CD* and click *OK*.

   f-spot copies the files and opens the CD writing dialog. Assign a name to your image disk and determine the writing speed. Click *Write* to start the CD writing process.

Figure 8.5 *Exporting Images to a CD*



8.6 Basic Image Processing with f-spot

f-spot offers several very basic image editing functionalities. Enter the edit mode of f-spot by clicking the *Edit Image* icon in the toolbar or by double-clicking the image to edit. Switch images using the arrow keys at the bottom right. Choose from the following edit functions:

Table 8.2 *f-spot Edit Functions*

Function	Description
Sharpen	Access this function with *Edit* → *Sharpen*. Adjust the values for *Amount*, *Radius*, and *Threshold* to your needs and click *OK*.
Crop Image	To crop the image to a selection you made, either choose a fixed ratio crop or the *No Constraint* option from the drop-down menu at the bottom left, select the region to crop, and click the scissor icon next to the ratio menu.
Red Eye Reduction	In a portrait shot, select the eye region of the face and click the red eye icon.
Adjust Color	View the histogram used in the creation of the shot and correct exposure and color temperature if necessary.

TIP

Professional image editing can be done with the GIMP. More information about The GIMP can be found in Chapter 9, *Manipulating Graphics with The GIMP* (page 191).

Manipulating Graphics with The GIMP

9

The GIMP (*The GNU Image Manipulation Program*) is a program for creating and editing pixel graphics. In most aspects, its features are comparable to those of Adobe Photoshop and other commercial programs. Use it to resize and retouch photographs, design graphics for Web pages, make covers for your custom CDs, or almost any other graphics project. It meets the needs of both amateurs and professionals.

Like many other Linux programs, The GIMP is developed as a cooperative effort of developers worldwide who volunteer their time and code to the project. The program is under constant development, so the version included in your system may vary slightly from the version discussed here. The layout of the individual windows and window sections is especially likely to vary.

The GIMP is an extremely complex program. Only a small range of features, tools, and menu items are discussed in this chapter. See Section 9.6, "For More Information" (page 199) for ideas of where to find more information about the program.

9.1 Graphics Formats

There are two main formats for graphics—pixel and vector. The GIMP works only with pixel graphics, which is the normal format for photographs and scanned images. Pixel graphics consist of small blocks of color that together create the entire image. The files can easily become quite large because of this. It is also not possible to increase the size of a pixel image without losing quality.

Unlike pixel graphics, vector graphics do not store information for all individual pixels. Instead, they store information about how image points, lines, or areas are grouped together. Vector images can also be scaled very easily. The drawing application of OpenOffice.org, for example, uses this format.

9.2 Starting The GIMP

Start The GIMP from the main menu. Alternatively, enter `gimp &` in a command line.

9.2.1 Initial Configuration

When starting The GIMP for the first time, a configuration wizard opens for preparatory configuration. The default settings are acceptable for most purposes. Press *Continue* in each dialog unless you are familiar with the settings and prefer another setup.

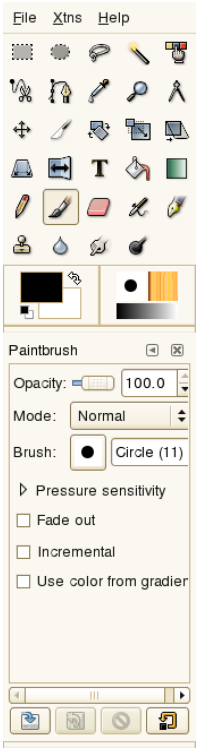
9.2.2 The Default Windows

Three windows appear by default. They can be arranged on the screen and, except the toolbox, closed if no longer needed. Closing the toolbox closes the application. In the default configuration, The GIMP saves your window layout when you exit. Dialogs left open reappear when you next start the program.

The Toolbox

The main window of The GIMP, shown in Figure 9.1, “The Main Window” (page 193), contains the main controls of the application. Closing it exits the application. At the very top, the menu bar offers access to file functions, extensions, and help. Below that, find icons for the various tools. Hover the mouse over an icon to display information about it.

Figure 9.1 *The Main Window*



The current foreground and background color are shown in two overlapping boxes. The default colors are black for the foreground and white for the background. Click the box to open a color selection dialog. Swap the foreground and background color with the bent arrow symbol to the upper right of the boxes. Use the black and white symbol to the lower left to reset the colors to the default.

To the right, the current brush, pattern, and gradient are shown. Click the displayed one to access the selection dialog. The lower portion of the window allows configuration of various options for the current tool.

Layers, Channels, Paths, Undo

In the first section, use the drop-down box to select the image to which the tabs refer. By clicking *Auto*, control whether the active image is chosen automatically. By default, *Auto* is enabled.

Layers shows the different layers in the current images and can be used to manipulate the layers. *Channels* shows and can manipulate the color channels of the image.

Paths are a vector-based method of selecting parts of an image. They can also be used for drawing. *Paths* shows the paths available for an image and provides access to path functions. *Undo* shows a limited history of modifications made to the current image.

9.3 Getting Started

Although The GIMP can be a bit overwhelming for new users, most quickly find it easy to use once they work out a few basics. Crucial basic functions are creating, opening, and saving images.

9.3.1 Creating a New Image

To create a new image, select *File* → *New* or press Ctrl + N. This opens a dialog in which to make settings for the new image. If desired, select a predefined setting called a *Template*. To create a custom template, select *File* → *Dialogs* → *Templates* and use the controls offered by the window that opens.

In the *Image Size* section, set the size of the image to create in pixels or another unit. Click the unit to select another unit from the list of available units. The ratio between pixels and a unit is set in *Resolution*, which appears when the *Advanced Options* section is open. A resolution of 72 pixels per inch corresponds to common screen display. It is sufficient for Web page graphics. A higher resolution should be used for images to print. For most printers, a resolution of 300 pixels per inch results in an acceptable quality.

In *Colorspace*, select whether the image should be in color (*RGB*) or *Grayscale*. Select the *Fill Type* for the new image. *Foreground Color* and *Background Color* use the colors selected in the toolbox. *White* uses a white background in the image. *Transparent* creates a clear image. Transparency is represented by a gray checkerboard pattern. Enter a comment for the new image in *Comment*.

When the settings meet your needs, press *OK*. To restore the default settings, press *Reset*. Pressing *Cancel* aborts creation of a new image.

9.3.2 Opening an Existing Image

To open an existing image, select *File* → *Open* or press Ctrl + O. In the dialog that opens, select the desired file. You can also press Ctrl + L and type directly the URI of the desired image. Then click *Open* to open the selected image or press *Cancel* to skip opening an image.

9.3.3 Scanning an Image

Instead of opening an existing image or creating a new one, you can scan one. To scan directly from The GIMP, make sure that the package `xsane` is installed. To open the scanning dialog, select *File* → *Acquire* → *XSane: scanning device*.

Create a preview when the object to scan is smaller than the total scanning area. Press *Acquire preview* in the *Preview* dialog to create a preview. If you want to scan only part of the area, select the desired rectangular part with the mouse.

In the *xsane* dialog, select whether to scan a grayscale or color image and the required scan resolution. The higher the resolution, the better the quality of the scanned image is. However, this also results in a correspondingly larger file and the scanning process can take a very long time at higher resolutions. The size of the final image (both in pixels and bytes) is shown in the lower part of the dialog.

In the *xsane* dialog, use the sliders to set desired gamma, brightness, and contrast values. Changes are visible in the preview immediately. Once all settings have been made, click *Scan* to scan the image.

9.3.4 The Image Window

The new, opened, or scanned image appears in its own window. The menu bar in the top of the window provides access to all image functions. Alternatively, access the menu by right-clicking the image or clicking the small arrow button in the left corner of the rulers.

File offers the standard file options, such as *Save* and *Print*. *Close* closes the current image. *Quit* closes the entire application.

With the items in the *View* menu, control the display of the image and the image window. *New View* opens a second display window of the current image. Changes made in one view are reflected in all other views of that image. Alternate views are useful for magnifying a part of an image for manipulation while seeing the complete image in another view. Adjust the magnification level of the current window with *Zoom*. When *Shrink Wrap* is selected, the image window is resized to fit the current image display exactly.

9.4 Saving Images

No image function is as important as *File → Save*. It is better to save too often than too rarely. Use *File → Save as* to save the image with a new filename. It is a good idea to save image stages under different names or make backups in another directory so you can easily restore a previous state.

When saving for the first time or using *Save as*, a dialog opens in which to specify the filename and type. Enter the filename in the field at the top. For *Save in folder*, select the directory in which to save the file from a list of commonly used directories. To use a different directory or create a new one, open *Browse for other folders*. It is recommended to leave *Select File Type* set to *By Extension*. With that setting, The GIMP determines the file type based on the extension appended to the filename. The following file types are frequently useful:

XCF
: This is the native format of the application. It saves all layer and path information along with the image itself. Even if you need an image in another format, it is usually a good idea to save a copy as XCF to simplify future modifications.

PAT
: This is the format used for The GIMP patterns. Saving an image in this format enables using the image as a fill pattern in The GIMP.

JPG
: JPG or JPEG is a common format for photographs and Web page graphics without transparency. Its compression method enables reduction of file sizes, but information is lost when compressing. It may be a good idea to use the preview option when adjusting the compression level. Levels of 85% to 75% often result in an acceptable image quality with reasonable compression. Saving a backup in a lossless format, like XCF, is also recommended. If editing an image, save only the finished image as JPG. Repeatedly loading a JPG then saving can quickly result in poor image quality.

GIF
: Although very popular in the past for graphics with transparency, GIF is less often used now because of license issues. GIF is also used for animated images. The format can only save *indexed* images. The file size can often be quite small if only a few colors are used.

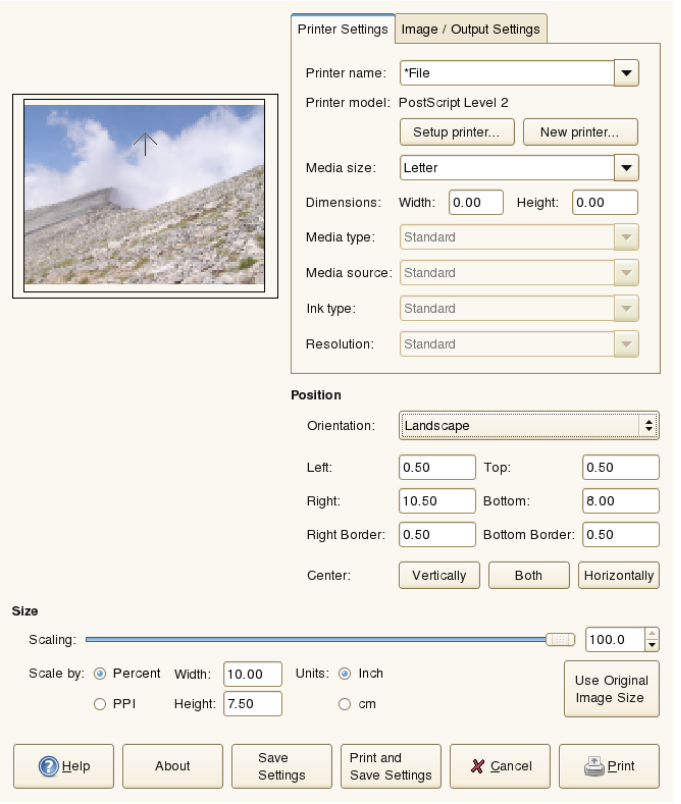
PNG
: With its support for transparency, lossless compression, free availability, and increasing browser support, PNG is replacing GIF as the preferred format for Web graphics with transparency. An added advantage is that PNG offers partial transparency, which is not offered by GIF. This enables smoother transitions from colored areas to transparent areas (*antialiasing*).

To save the image in the chosen format, press *Save*. To abort, press *Cancel*. If the image has features that cannot be saved in the chosen format, a dialog appears with choices for resolving the situation. Choosing *Export*, if offered, normally gives the desired results. A window then opens with the options of the format. Reasonable default values are provided.

9.5 Printing Images

To print an image, select *File → Print* from the image menu. If your printer is configured in the system, it should appear in the list. In some cases, it may be necessary to select an appropriate driver with *Setup Printer*. Select the appropriate paper size with *Media Size* and the type in *Media Type*. Other settings are available in the *Image / Output Settings* tab.

Figure 9.2 *The Print Dialog*



In the bottom portion of the window, adjust the image size. Press *Use Original Image Size* to take these settings from the image itself. This is recommended if you set an appropriate print size and resolution in the image. Adjust the image's position on the page with the fields in *Position* or by dragging the image in *Preview*.

When satisfied with the settings, press *Print*. To save the settings for future use, instead use *Print and Save Settings*. *Cancel* aborts printing.

9.6 For More Information

The following resources are useful for users of The Gimp, even if some of them apply to older versions.

- *Help* provides access to the internal help system. This documentation is also available in HTML and PDF formats at `http://docs.gimp.org`.
- Many tutorials explaining basic or advanced image manipulation techniques with The GIMP are available at `http://gimp.org/tutorials/`.
- The GIMP User Group offers an informative Web site at `http://gug.sunsite.dk`.
- `http://www.gimp.org` is the official home page of The GIMP.
- *Grokking the GIMP* by Carey Bunks is an excellent book based on an older version of The GIMP. Although some aspects of the program have changed, it can provide excellent guidance for image manipulation. An online version is available at `http://gimp-savvy.com/BOOK/`.

Playing and Managing Your Music with Helix Banshee

10

Helix* Banshee™ is a GNOME music management and playback application that lets you import CDs, sync your music collection to an iPod*, play music directly from an iPod, create playlists with songs from your library, and create audio and MP3 CDs from subsets of your library.

To access Helix Banshee, click *Computer* → *Helix Banshee Music Player*.

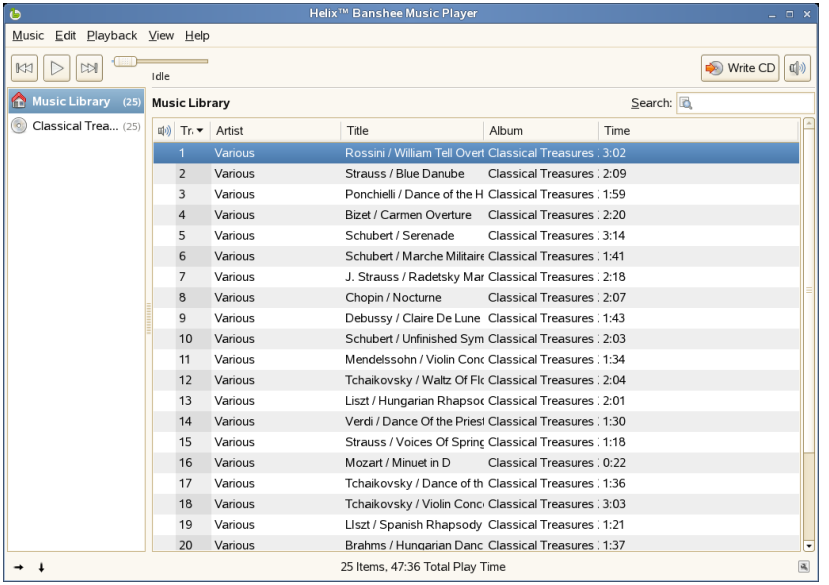
The first time you open Helix Banshee, you are prompted to accept a license agreement, after which you are prompted to import music. Choose an import source, such as your home directory, a local folder, or a local file, then click *Import Music Source*.

Figure 10.1 *Import Music Library*

Import Music to Library
Import Music to Library
Your music library is empty. You may import new music into your library now, or choose to do so later.
Choose an import source:
Local Folder
Do not show this dialog again
Cancel
Import Music Source

After successfully importing your music, your library is displayed.

Figure 10.2 *Helix Banshee Library*


Helix™ Banshee Music Player
Music Edit Playback View Help
Idle
Write CD
Music Library (25)
Classical Trea... (25)
Music Library
Search:
Tr. Artist Title Album Time
1 Various Rossini / William Tell Overt Classical Treasures . 3:02
2 Various Strauss / Blue Danube Classical Treasures . 2:09
3 Various Ponchielli / Dance of the H Classical Treasures . 1:59
4 Various Bizet / Carmen Overture Classical Treasures . 2:20
5 Various Schubert / Serenade Classical Treasures . 3:14
6 Various Schubert / Marche Militaire Classical Treasures . 1:41
7 Various J. Strauss / Radetsky Mar Classical Treasures . 2:18
8 Various Chopin / Nocturne Classical Treasures . 2:07
9 Various Debussy / Claire De Lune Classical Treasures . 1:43
10 Various Schubert / Unfinished Sym Classical Treasures . 2:03
11 Various Mendelssohn / Violin Conc Classical Treasures . 1:34
12 Various Tchaikovsky / Waltz Of Fl Classical Treasures . 2:04
13 Various Liszt / Hungarian Rhapso Classical Treasures . 2:01
14 Various Verdi / Dance Of the Pries Classical Treasures . 1:30
15 Various Strauss / Voices Of Spring Classical Treasures . 1:18
16 Various Mozart / Minuet in D Classical Treasures . 0:22
17 Various Tchaikovsky / Dance of th Classical Treasures . 1:36
18 Various Tchaikovsky / Violin Conc Classical Treasures . 3:03
19 Various Liszt / Spanish Rhapsody Classical Treasures . 1:21
20 Various Brahms / Hungarian Danc Classical Treasures . 1:37
25 Items, 47:36 Total Play Time

10.1 Managing Your Library

You can use the library to do a variety of things, including playing, organizing, and importing music. You can also view a variety of information about your music collection, including playback statistics (when a song was last played and how many times).

10.1.1 Playing Your Music

To play a song, simply select the song in the library and click the Play button ( ).

Use the buttons on the upper left corner ( ) to pause a song or play the next or previous song. Use to adjust the volume. You can also use the items on the *Playback* menu to repeat or shuffle songs.

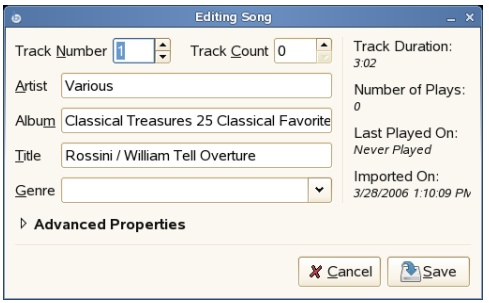
Helix Banshee also has an integrated CD player. When you insert a music CD, your CD title appears in the left panel. Select the title and click the Play button to play your full CD.

10.1.2 Organizing Your Music

To create a new playlist, click *Music* → *New Playlist* (or press Ctrl + N). A new playlist is displayed in the left panel. Double-click *New Playlist* and enter the name you want. You can drag and drop songs from one playlist to another, or use the options on the *Edit* menu to remove or delete songs and rename or delete playlists.You can sort a playlist by clicking the title of the column. Click the column again to reverse the sort. You can also right-click *Music Library*, then click *Sort Playlists*.

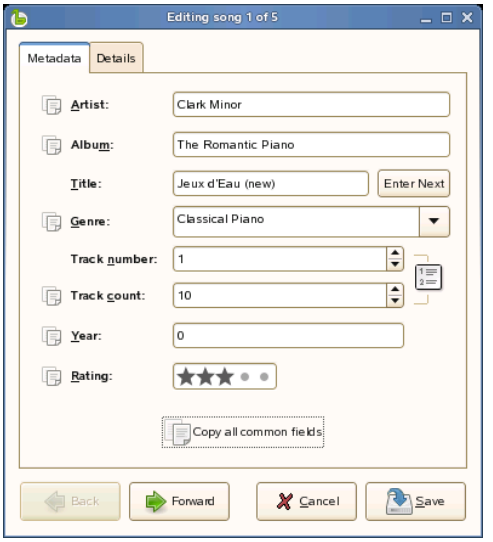
You can edit the name of the artist, album, and title, as well as the track number and track count. Simply select a song, then click *Edit* → *Edit Song Metadata*. You can also rate your music, which gives you the option to only play songs with a certain rating, by selecting the number of stars you want to assign in the *Rating* field.

Figure 10.3 *Editing Song Dialog Box*



If you want to set all fields in a group to the same value, select multiple songs in a playlist, then click *Edit* → *Edit Song Metadata*. Make the changes you want, then click *Copy all common fields*. You can also use the *Back* and *Forward* buttons to cycle through the selected songs.

Figure 10.4 *Editing Multiple Songs Dialog Box*



Click the *Details* tab to view detailed information about the selected song, including when a song was last played, when the song was imported, how long the song is, and how many times the song has been played.

10.1.3 Creating Smart Playlists

You can create playlists that automatically add and remove songs based on criteria you specify. For example, a smart playlist can contain songs you rated as five stars but that you haven't listened to for six months. Another smart playlist can contain all songs published in 2006 that you have labeled with the Classical genre.

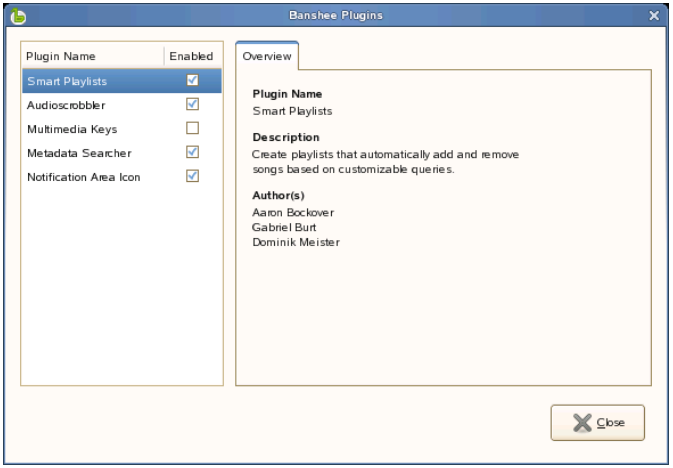
Helix Banshee automatically updates all smart playlists when a change is made to your music library. If you import new songs, Helix Banshee checks to see if they match any of your available smart playlists. When applicable, Helix Banshee also updates your smart playlists if you just listened to a song or updated a song's metadata.

The first time you create a smart playlist, you need to enable the plug-in. You can then create a new smart playlist, choose from a list of predefined smart playlists, or create a smart playlist based on a current search.

Enabling the Smart Playlist Plug-In

1 In Helix Banshee, click *Edit* → *Plugins*.

2 Select the check box to the right of *Smart Playlists* in the left column.

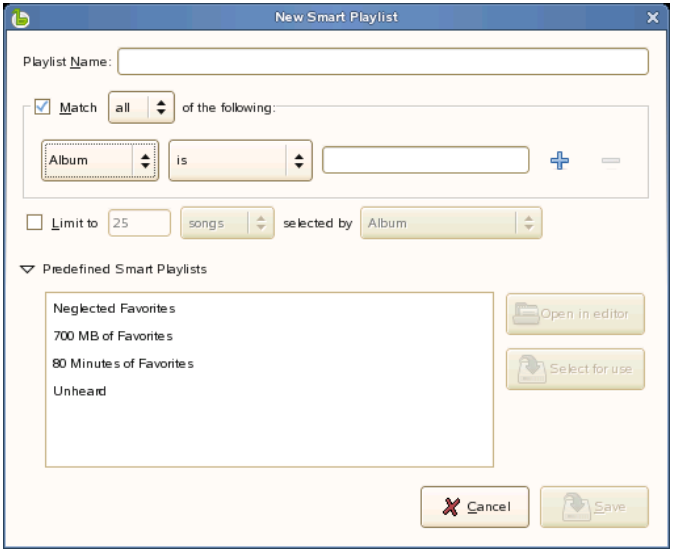


3 Click *Close*.

Creating a Smart Playlist

1 In Helix Banshee, click *Music* → *New Smart Playlist*.

2 Specify a name for the smart playlist, then select the criteria for songs in this playlist to match.



Use the plus and minus symbols to add or remove criteria. To use an already defined smart playlist, click *Predefined Smart Playlists*, then select the playlist you want.

3 Click *Save*.

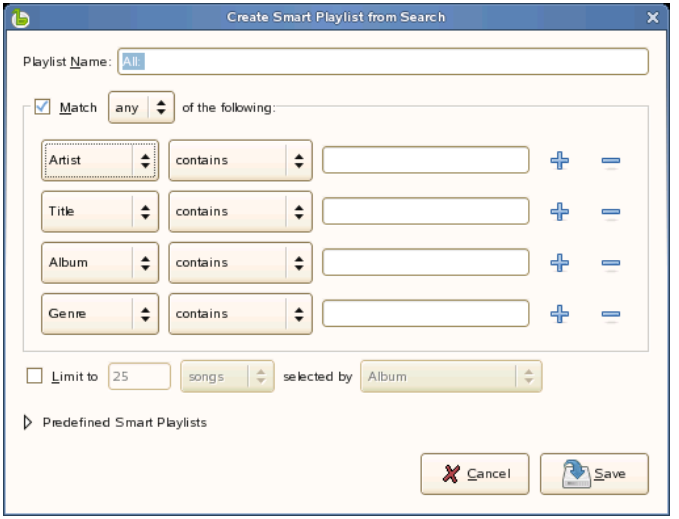
The smart playlist is added to your music library.

Creating a Smart Playlist from a Search

You can create a smart playlist based on search criteria. For example, if you search for all songs in your music library by a certain artist, Helix Banshee can create a smart playlist in which all songs by that artist are selected.

1 In Helix Banshee, click *Music* → *New Smart Playlist from Search*.

2 Specify a name for the smart playlist, then specify the search criteria you want.



Use the plus and minus symbols to add or remove criteria. To use an already defined smart playlist, click *Predefined Smart Playlists*, then select the playlist you want.

3 Click *Save*.

The smart playlist is added to your music library.

10.1.4 Importing Music

Helix Banshee can import music from a file, folder, or CD.

1 In Helix Banshee, click *Music* → *Import Music*.

2 Select an import source.

3 Click *Import Music Source*.

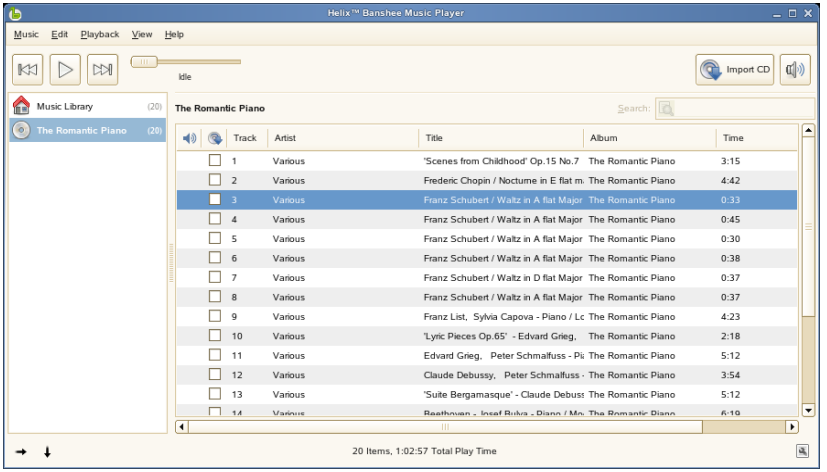
To rip music from a CD to your music collection:

1 Insert a CD into your CD or DVD drive.

Helix Banshee automatically lists the CD as a playlist in the left menu.

2 Click the playlist, then click *Import CD* in the upper right corner.

Figure 10.5 *Import CD*


Helix™ Banshee Music Player
Music Edit Playback View Help
Idle
Import CD
Music Library (20)
The Romantic Piano (20)
The Romantic Piano
Search:
Track Artist Title Album Time
1 Various 'Scenes from Childhood' Op.15 No.7 The Romantic Piano 3:15
2 Various Frederic Chopin / Nocturne in E flat m. The Romantic Piano 4:42
3 Various Franz Schubert / Waltz in A flat Major The Romantic Piano 0:33
4 Various Franz Schubert / Waltz in A flat Major The Romantic Piano 0:45
5 Various Franz Schubert / Waltz in A flat Major The Romantic Piano 0:30
6 Various Franz Schubert / Waltz in A flat Major The Romantic Piano 0:38
7 Various Franz Schubert / Waltz in D flat Major The Romantic Piano 0:37
8 Various Franz Schubert / Waltz in A flat Major The Romantic Piano 0:37
9 Various Franz List, Sylvia Capova - Piano / Lc The Romantic Piano 4:23
10 Various 'Lyric Pieces Op.65' - Edvard Grieg, The Romantic Piano 2:18
11 Various Edvard Grieg, Peter Schmalfuss - Pi The Romantic Piano 5:12
12 Various Claude Debussy, Peter Schmalfuss - The Romantic Piano 3:54
13 Various 'Suite Bergamasque' - Claude Debuss The Romantic Piano 5:12
20 Items, 1:02:57 Total Play Time

10.2 Using Helix Banshee with Your iPod

To play music from your iPod, simply plug your iPod into your system. Your iPod appears in the left panel in Helix Banshee. Select the song you want to hear, then click the Play button.

Figure 10.6 *iPod List in Helix Banshee*

When the iPod is selected in the left panel, information about your iPod is displayed at the bottom left, including disk usage and *Sync*, *Properties*, and *Eject* buttons.

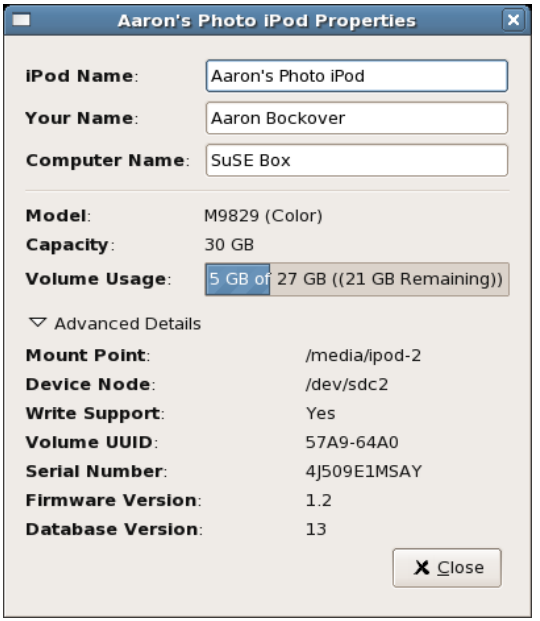
Figure 10.7 *iPod Buttons in Helix Banshee*

There are three ways to manage the music on your iPod:

- **Manually:** Browse your iPod and drag music between your library and the iPod.
- **Automatically sync:** Automatically copies everything in your library to the iPod.
- **Automatic merge:** All the music on your iPod that is not in your library is downloaded to your library, and all the music that is in your library and not in your iPod is uploaded to your iPod.

Use the iPod Properties dialog box to rename your iPod, and to view vital statistics.

Figure 10.8 *Helix Banshee iPod Properties*



10.3 Creating Audio and MP3 CDs

1. Insert a blank CD in your CD or DVD drive.

2. Select the songs you want to burn, then click the *Write CD* button in the upper right side of Helix Banshee.

3. Specify the disk options you want, then click *Write*.

   For example, click *Eject disk after writing* if you want Helix Banshee to eject your CD when the writing is completed.

10.4 Sharing Your Music

You can automatically update your online Audioscrobbler [http://www.last.fm] profile with the music you listen to in Helix Banshee. This lets others see what you are listening to, and gives you access to charts detailing your listening history. If you join groups such as the Banshee Group [http://www.last.fm/group/Banshee], you can also see what other people are listening to.

1. In Helix Banshee, click *Music* → *Audioscrobbler* → *Configure*.

2. If you have already registered with Last.fm [http://www.last.fm], click *Enable song reporting* and specify your Last.fm username and password.

   If you have not previously registered with Last.fm, click *Create an account*. This opens the Last.fm Web site where you can register. Click *Enable song reporting* and specify your Last.fm username and password.

3. Click *Close*.

   Helix Banshee starts reporting with the next song you play.

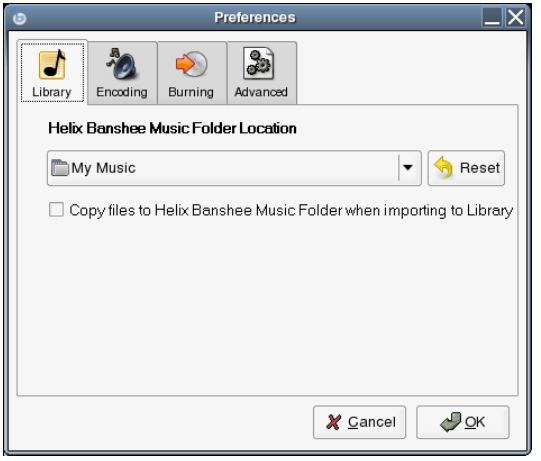
10.5 Configuring Preferences

You can configure Helix Banshee preferences by clicking *Edit* → *Preferences*. The Preferences dialog box contains the following options:

Music Library: Lets you specify a music folder location. This location is used when you import music. Click *Copy files to music folder when importing* to place a copy of the files you import in your Helix Banshee music folder.

CD Importing: Lets you determine encoding profiles for CD ripping. Select the output format you want, then click *Edit* to configure advanced options for that format.

Figure 10.9 *Helix Banshee Preferences Dialog Box*

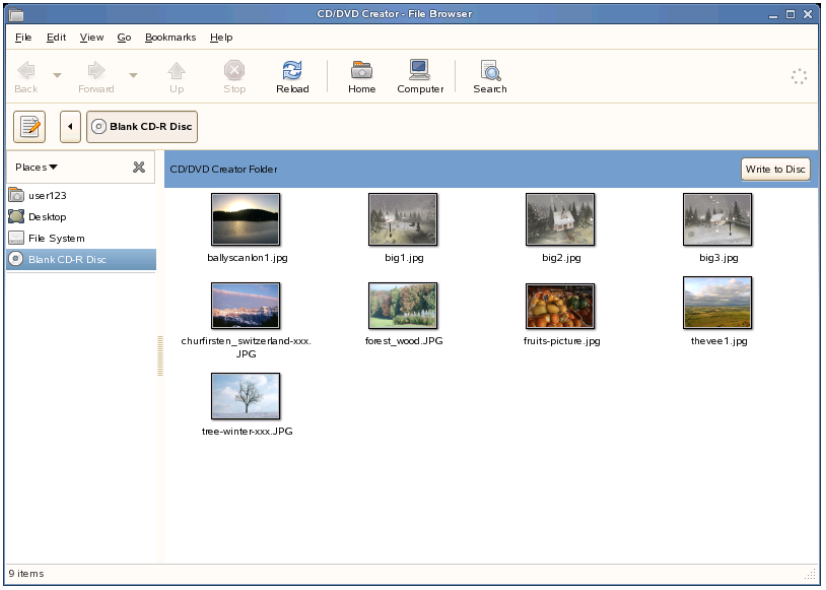


11 Burning CDs and DVDs

GNOME uses the Nautilus file manager to burn CDs and DVDs. To burn a CD or DVD:

1. Click *Computer* → *More Applications* → *Multimedia* → *GNOME CD/DVD Creator* or insert a blank disc and click *Make Data CD*. or *Make Audio CD*.

2. Copy the files you want to put on the CD or DVD into the *CD/DVD Creator* window.



3 Click *Write to Disc*.

4 Modify information in the Write to Disc dialog or accept the defaults, then click *Write*.

The files are burned on the disc. This could take a few minutes, depending on the amount of data being burned and the speed of your burner.

You can use the Helix Banshee music player to burn audio and MP3 CDs, as explained in Section 10.3, “Creating Audio and MP3 CDs” (page 210).

Finding the Information You Need

A

To support you in your everyday work with openSUSE™ and to help you explore your Linux system, Novell and the open source community at large have created a wealth of information. We have compiled relevant information and made it available to you in various formats. You can access detailed documentation provided with your product as well as additional information over the Internet.

A.1 Included Documentation

There are several places where you can find online documentation shipped with your product. The GNOME desktop includes a help center that offers a wide range of online documentation for your openSUSE. There, you can access openSUSE-specific information as well as application descriptions provided by the open source community.

When installing new software with YaST, the software documentation is installed automatically in most cases and usually appears in the help center of your desktop. However, some applications, such as The GIMP, may have different online help packages that can be installed separately with YaST and do not integrate into the help center.

A.2 Additional Resources and More Information

You can also access the specific manuals and documentation delivered with your product on the Internet at http://www.novell.com/documentation/opensuse102.

If you are searching for additional information, you can also refer to the following Internet sites:

- SUSE Support Database [http://en.opensuse.org/SDB:SDB]
- Novell Technical Support Knowledgebase [http://www.novell.com/support/]
- Product Support Community Resources [http://support.novell.com/forums/index.html]
- GNOME Documentation Web site [http://www.gnome.org/learn/]

In addition, general-purpose search engines are often helpful. For example, you might try the search terms `Linux CD-RW help` or `OpenOffice file conversion problem` if you were having trouble with the CD burning or with OpenOffice.org file conversion. Google™ also has a specific Linux search engine [http://www.google.com/linux] that you might find useful.

Moving from Windows to Linux

B

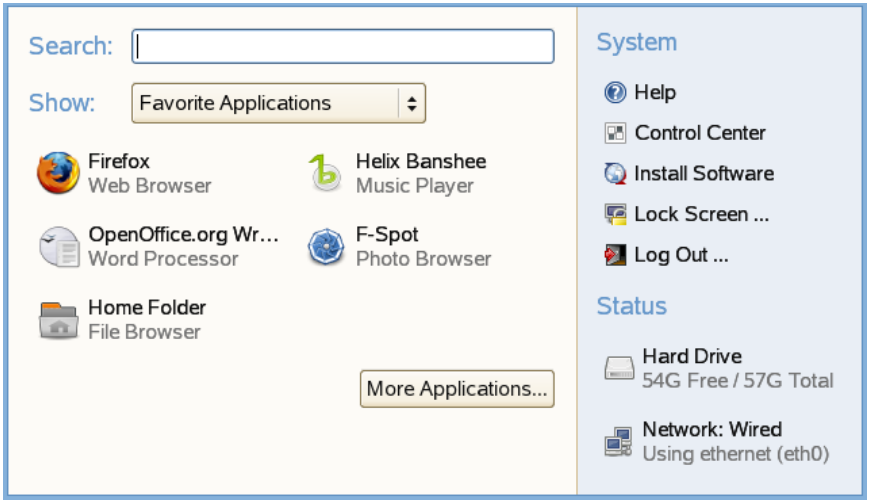
If you are coming from Microsoft Windows, take a look at how familiar elements of Windows translate to openSUSE™. After logging in, you will notice that the desktop has a familiar layout and recognizable icons, many of them similar to the Windows and Macintosh desktops.

Figure B.1 *GNOME Desktop*

B.1 Starting Applications from the Main Menu

Similar to the Start menu on Windows, you can access all the programs installed on your system from the main menu. To open the menu click *Computer* in the left corner of the panel. The function-oriented menu structure makes it easy to find the right application for your purpose even if you do not know the application names yet. Find more information about the main menu in Section 1.4, “Using the Main Menu” (page 10).

Figure B.2 *Main Menu in GNOME*

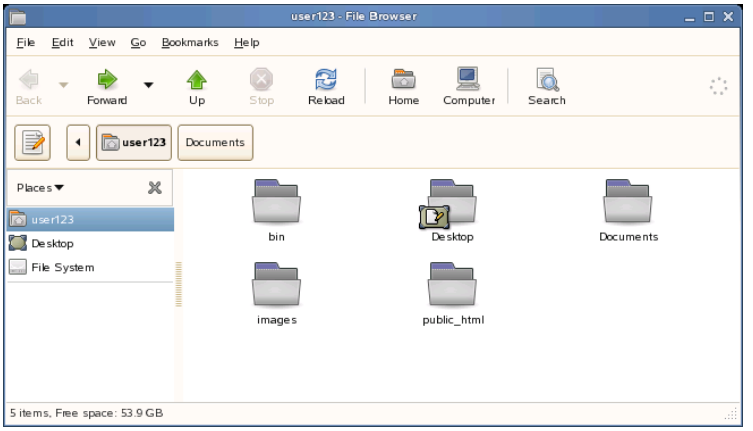


Alternatively, you can also start programs from the command line. Click *Computer* → *More Applications* → *System* → *Gnome Terminal* to open a dialog where you can enter a command to start the application. The name of the command is often (but not always) the application name written in lowercase.

B.2 Managing Files

To start the File Manager, click *Computer* → *Home Folder*. or click your home folder icon on the desktop.

Figure B.3 *File Manager*

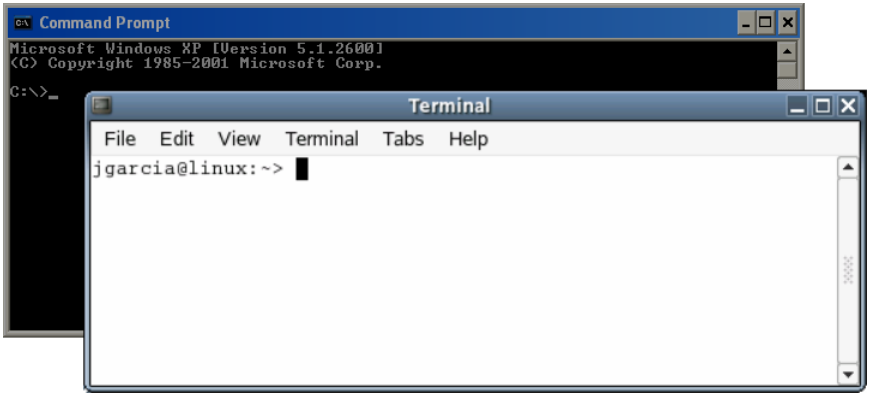


For more information about the File Manager, see Section 1.5.1, “Managing Folders and Files with the File Manager” (page 14).

B.3 Using the Command Line

To run commands in a command line environment, similar to a command prompt on Windows, click *Computer* → *More Applications* → *System* → *Gnome Terminal*.

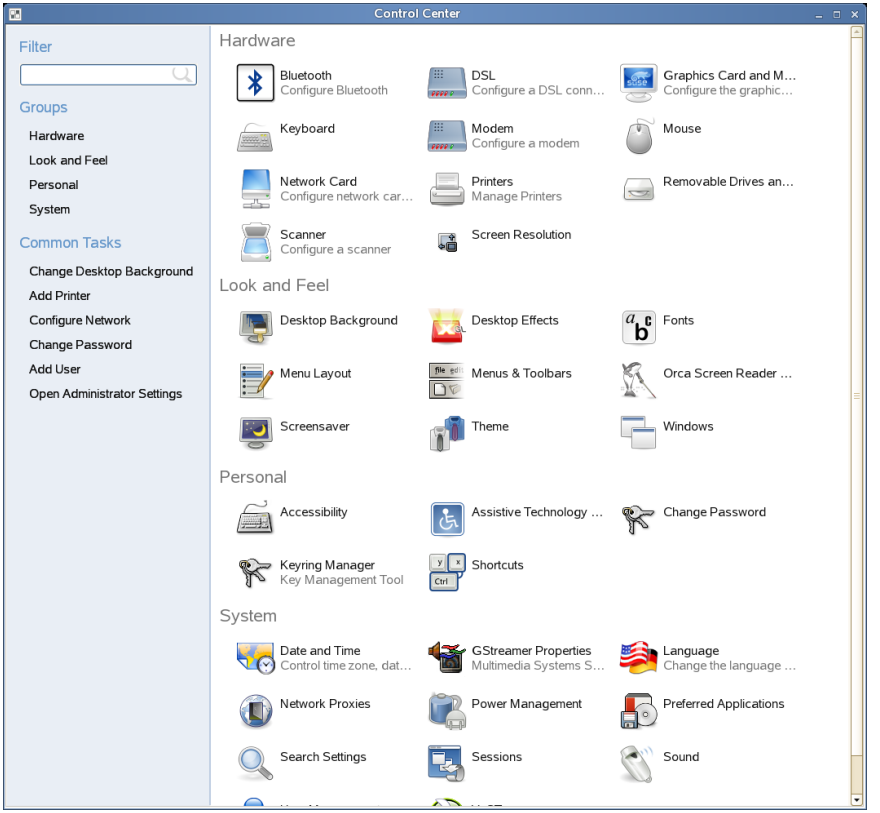
Figure B.4 *Windows Command Prompt and Terminal*



B.4 Customizing Your Desktop

To change to the way your GNOME desktops looks and behaves, click *Computer* → *Control Center*. Some of the settings you might want to change include the desktop background, screen saver, keyboard and mouse configuration, sounds, and file associations.

Figure B.5 *GNOME Control Center*



For more information, see Chapter 2, *Customizing Your Settings* (page 35).

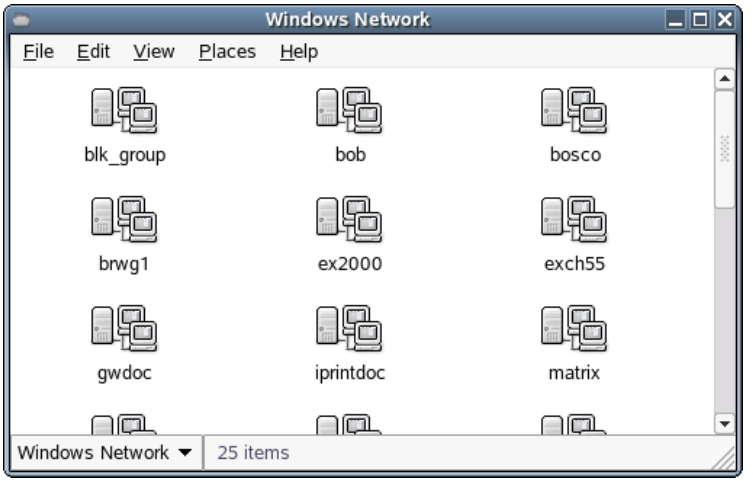
B.5 Switching between Applications

Similar to the taskbar on Windows, the bottom panel in GNOME lets you easily switch between open windows. Unlike Windows, GNOME lets you set up multiple desktops where each one can run different programs. Switch between them with a single click.

B.6 Accessing Network Resources

From your desktop, you can access files and directories or certain services on remote hosts or make your own files and directories available to other users in your network. openSUSE offers various different ways of accessing and creating network-shared resources. Given that the network structure and the configuration of your computer allow for it, you can easily browse your network for shared resources and services with the file manager.

Figure B.6 *GNOME Network Browsing*



To learn more about the various possibilities of accessing network resources, refer to Section 1.5.4, “Accessing Files on the Network” (page 25).

Getting to Know Linux Software

C

Linux comes with a wealth of applications, often offering more than one solution to specific needs. The difficulty is finding the application that suits your needs best. The next few sections introduce some of the most powerful Linux counterparts of common Windows software. Each section is dedicated to one particular field of application and presents an overview of the Windows applications and Linux equivalents for several tasks. Below each table, find further information about the Linux applications with links to more information. This list is by no means complete, because software development is an evolutionary process and new applications are being created every minute.

TIP: Missing Applications

Not all applications mentioned below are installed on your system by default and some may not be shipped with your product. If the application you want to use is missing, ask your system administrator. If the application is provided by your product, you can install it with YaST. Use the search function of the YaST software management tool to find the package names.

C.1 Office

This section features the most popular and powerful Linux office and business software solutions. These include office suites, databases, accounting software, and project management software.

Table C.1 *Office Software for Windows and Linux*

Task	Windows Application	Linux Application
Office Suite	MS Office, StarOffice, OpenOffice.org	OpenOffice.org, StarOffice, KOffice
Word Processor	MS Word, StarOffice/OpenOffice.org Writer, WordPerfect	OpenOffice.org/StarOffice Writer, KWord
Spreadsheet	MS Excel, StarOffice/OpenOffice.org Calc	OpenOffice.org/StarOffice Calc, Gnumeric, KSpread
Presentation	MS PowerPoint, StarOffice/OpenOffice.org Impress	OpenOffice.org/StarOffice Impress, KPresenter
Data Plotting	MS Excel, MicroCall Origin	OpenOffice.org Calc, Kst, Gnuplot, Grace (Xmgr), LabPlot
Local Database	MS Access, OpenOffice.org Base	OpenOffice.org Base, Rekall, kexi, Mergeant, PostgreSQL
Financial Accounting	MS Money, Quicken, moneyplex	GnuCash, moneyplex, KMyMoney
Project Management	MS Project	Planner, Taskjuggler
Mind Mapping	MindManager, Free Mind	VYM (View Your Mind), Free Mind, KDissert

FreeMind
: FreeMind helps you to visualize your thoughts by creating and editing a mind map. You can easily copy nodes or the style of nodes and paste texts from sources such as HTML, RTF, and mails. The mind maps can be exported into various formats, such as HTML and XML. For more information, refer to `http://freemind.sourceforge.net/wiki/index.php/Main_Page`.

GnuCash
: GnuCash is a software tool to control both your personal and business finances. Keep track of income and expenses and manage your bank accounts and stock portfolios all using one piece of software. Learn more about GnuCash at http://www.gnucash.org.

Gnumeric
: Gnumeric is a spreadsheet solution for the GNOME desktop environment. Find more information about Gnumeric at http://www.gnumeric.org.

Gnuplot
: Gnuplot is a very powerful and portable command line–controlled data plotting software. It is also available for MacOS and Windows platforms. Plots created by Gnuplot can be exported to various formats, such as PostScript, PDF, and SVG, allowing you to process these plots easily. Find more information about Gnuplot at http://www.gnuplot.info/index.html.

Grace
: Grace is a very mature 2D plotting tool for almost all flavors of Unix including Linux. Create and edit plots with a graphical user interface. Grace supports an unlimited number of graphs per plot. Its export formats include JPEG, PNG, SVG, PDF, PS, and EPS. Find more information at http://plasma-gate.weizmann.ac.il/Grace/.

Kdissert
: Kdissert is an application for structuring ideas and concepts, mostly aimed at students but also helpful for teachers, decision makers, engineers, and businessmen. Ideas are first laid down on a canvas then associated into a tree. You can generate various outputs from the mind map, such as PDF files, text documents (also for OpenOffice.org Writer), and HTML files. Find more information at http://freehackers.org/~tnagy/kdissert/.

Kexi
: See KOffice (page 226).

KMyMoney
: KMyMoney is a personal finance manager for KDE. It enables users of open source operating systems to keep track of their personal finances by providing a broad array of financial features and tools. Learn more about KMyMoney at http://kmymoney2.sourceforge.net.

KOffice
: KOffice is an integrated office suite for the KDE desktop. It comes with various modules like word processing (KWord), spreadsheets (KSpread), presentations (KPresenter), several image processing applications (Kivio, Karbon14, Krita), a database front-end (Kexi), and many more. Find more information about KOffice at http://www.koffice.org/.

KPresenter
: See KOffice (page 226).

Kst
: Kst is a KDE application for real-time data viewing and plotting with basic data analysis functionality. Kst contains many powerful built-in features, such as robust plotting of live streaming data, and is expandable with plug-ins and extensions. Find more about Kst at http://kst.kde.org/.

KWord
: See KOffice (page 226).

LabPlot
: LabPlot is a program for creating and managing two or three-dimensional data plots. Graphs can be produced both from data and functions and one plot might include multiple graphs. It also offers various data analysis methods. Find more information about LabPlot at http://labplot.sourceforge.net/.

Mergeant
: Mergeant is a database front-end for the GNOME desktop. Find more information at http://www.gnome-db.org.

moneyplex
: moneyplex is a tool to control your finances. All tasks from managing incoming resources and expenses and monitoring your stock portfolio to online transactions via the HBCI standard are handled by moneyplex. Keep track of your financial transactions over time using various analysis options. Because this tool is also available for Windows, users can migrate very easily without having to learn a whole new application interface. Find more information about moneyplex at http://www.matrica.de.

OpenOffice.org
: OpenOffice.org is the open source equivalent of MS Office. It is a very powerful office suite including a word processor (Write), a spreadsheet (Calc), a database

manager (Base), a presentation manager (Impress), a drawing program (Draw), and a formula editor for generating mathematical equations and formulas (Math). Users familiar with the MS Office family of applications find a very similar application interface and all the functionality to which they are accustomed. Because OpenOffice.org is capable of importing data from MS Office applications, the transition from one office suite to the other is very smooth. A Windows version of OpenOffice.org even exists, enabling Windows users to switch to an open source alternative while still using Windows. Find more information about OpenOffice.org at http://www.openoffice.org/ and read our OpenOffice.org chapter for a short introduction to the office suite.

Planner
: Planner is a project management tool for the GNOME desktop aiming to provide functionality similar to the project management tools used under Windows. Among its various features are Gantt charting abilities and different kinds of views of tasks and resources. Find more information about Planner at http://www.imendio.com/projects/planner/.

PostgreSQL
: PostgreSQL is an object-relational database management system that supports an extended subset of the SQL standard, including transactions, foreign keys, subqueries, triggers, and user-defined types and functions. Find more information about PostgreSQL at http://www.postgresql.org/.

Rekall
: Rekall is a tool for manipulating databases. Supported databases include MySQL, PostgreSQL, XBase with XBSQL, IBM DB2, and ODBC. Use Rekall to generate different sorts of reports and forms, design database queries, or import and export data to various formats. Find more information about Rekall at http://www.thekompany.com/products/rekall/.

StarOffice
: StarOffice is a proprietary version of OpenOffice.org and is distributed by Sun Microsystems. It is available on multiple platforms including Windows and Solaris. It includes certain advanced features not available with the free version (OpenOffice.org). Find more information about StarOffice at http://www.sun.com/software/star/staroffice/.

Taskjuggler
: Taskjuggler is a lean, but very powerful project management software. Take control of your projects using the Gantt charting features or by generating all kinds of reports (in XML, HTML, or CSV format). Those users who are not comfortable with controlling applications from the command line can use a graphical front-end to Taskjuggler. Find more information about Taskjuggler at http://www.taskjuggler.org.

VYM (View Your Mind)
: VYM is a software for visualizing your thoughts by creating and manipulating mind maps. Most manipulations do not require more than one mouse click. Branches can be inserted, deleted, and reordered very easily. VYM also offers a set of flags allowing you to mark certain parts of the map (important, time critical, etc.). Links, notes, and images can be added to a mind map as well. VYM mind maps use an XML format, allowing you to export your mind maps to HTML easily. Find more information about VYM at http://www.insilmaril.de/vym.

C.2 Network

The following section features various Linux applications for networking purposes. Get to know the most popular Linux browsers and e-mail and chat clients.

Table C.2 *Network Software for Windows and Linux*

Task	Windows Application	Linux Application
Web Browser	Internet Explorer, Firefox, Opera	Konqueror, Firefox, Opera, Epiphany
E-Mail Client/Personal Information Management	MS Outlook, Lotus Notes, Mozilla Thunderbird	Evolution, Kontact, Mozilla Thunderbird
Instant Messaging/IRC Clients	MSN, AIM, Yahoo Messenger, XChat, Gaim	Gaim, Kopete, Konversation, XChat
Conferencing (Video and Audio)	NetMeeting	GnomeMeeting/Ekiga

Task	Windows Application	Linux Application
Voice over IP	X-Lite	Ekiga, Skype
FTP Clients	leechftp, wsftp	gftp, kbear

Epiphany
: Epiphany is a lean, but powerful Web browser for the GNOME desktop. Many of its features and extensions resemble Firefox. Find more information about Epiphany at http://www.gnome.org/projects/epiphany/.

Evolution
: Evolution is personal information management software for the GNOME desktop combining mail, calendar, and address book functionality. It offers advanced e-mail filter and search options, provides sync functionality for Palm devices, and allows you to run Evolution as an Exchange or GroupWise client to integrate better into heterogeneous environments. Find more information about Evolution at http://www.gnome.org/projects/evolution/

Firefox
: Firefox is the youngest member of the Mozilla browser family. It runs on various platforms, including Linux, MacOS, and Windows. Its main features include built-in customizable searches, pop-up blocking, RSS news feeds, password management, tabbed browsing, and some advanced security and privacy options. Firefox is very flexible, allowing you to customize almost anything you want (searches, toolbars, skins, buttons, etc.). Neat add-ons and extensions can be downloaded from the Firefox Web site (https://addons.update.mozilla.org/?application=firefox). Find more information about Firefox at http://www.mozilla.org/products/firefox/. You can also read our introduction to using Firefox in Chapter 7, *Browsing with Firefox* (page 171).

Gaim
: Gaim is a smart instant messenger program supporting multiple protocols, such as AIM and ICQ (Oscar protocol), MSN Messenger, Yahoo!, IRC, Jabber, SILC, and GroupWise Messenger. It is possible to log in to different accounts on different IM networks and chat on different channels simultaneously. Gaim also exists in a Windows version. Find more information about Gaim at http://gaim.sourceforge.net/about.php.

gftp
: gftp is an FTP client using the GTK toolkit. Its features include simultaneous downloads, resume of interrupted file transfers, file transfer queues, download of entire directories, FTP proxy support, remote directory caching, passive and non-passive file transfers, and drag and drop support. Find more information at http://gftp.seul.org.

GnomeMeeting/Ekiga
: GnomeMeeting (recently renamed Ekiga) is the open source equivalent of Microsoft's NetMeeting. It features LDAP and ILS support for address lookup and integrates with Evolution to share the address data stored there. GnomeMeeting/Ekiga supports PC-to-phone calls, allowing you to call another party with just your computer, sound card, and microphone without any additional hardware. Find more information about GnomeMeeting/Ekiga at http://www.ekiga.org.

kbear
: KBear is a KDE FTP client with the ability to have concurrent connections to multiple hosts, three separate view modes, support for multiple protocols (like FTP and SFTP), a site manager plug-in, firewall support, logging capabilities, and much more. Find more information at http://sourceforge.net/projects/kbear.

Konqueror
: Konqueror is a multitalented application created by the KDE developers. It acts as file manager and document viewer, but is also a very powerful and highly customizable Web browser. It supports the current Web standards, such as CSS(2), Java applets, JavaScript and Netscape plug-ins (Flash and RealVideo), DOM, and SSL. It offers neat helpers like an integrated search bar and supports tabbed browsing. Bookmarks can be imported from various other Web browsers, like Internet Explorer, Mozilla, and Opera. Find more information about Konqueror at http://www.konqueror.org/. You can also read our chapter about Konqueror as a Web browser.

Kontact
: Kontact is the KDE personal information management suite. It includes e-mail, calendar, address book, and Palm sync functionalities. Like Evolution, it can act as an Exchange or GroupWise client. Kontact combines several stand-alone KDE applications (KMail, KAddressbook, KOrganizer, and KPilot) to form an entity providing all the PIM functionality you need. Find more information about Kontact

at http://www.kontact.org/. You can also read our introduction to using Kontact in our Kontact chapter.

Konversation
: Konversation is an easy-to-use IRC client for KDE. Its features include support for SSL connections, strikeout, multichannel joins, away and unaway messages, ignore list functionality, Unicode, autoconnect to a server, optional time stamps in chat windows, and configurable background colors. Find more information about Konversation at http://konversation.kde.org.

Kopete
: Kopete is a very intuitive and easy-to-use instant messenger tool supporting protocols including IRC, ICQ, AIM, GroupWise Messenger, Yahoo, MSN, Gadu-Gadu, Lotus Sametime, SMS messages, and Jabber. Find more information about Kopete at http://kopete.kde.org/. You can also read an introduction to using Kopete in our Kopete chapter.

Ekiga
: Ekiga is a smart and lean Voice over IP client using the SIP protocol to establish calls. Find more information at http://www.gnomemeeting.org/. You can also read our Linphone chapter.

Mozilla Thunderbird
: Thunderbird is an e-mail client application that comes as part of the Mozilla suite. It is also available for Microsoft Windows and MacOS, which facilitates the transition from one of these operating systems to Linux. Find more information about Mozilla Thunderbird at http://www.mozilla.org/products/thunderbird/.

Opera
: Opera is a powerful Web browser with neat add-ons like an optional e-mail client and a chat module. Opera offers pop-up blocking, RSS feeds, built-in and customizable searches, a password manager, and tabbed browsing. The main functionalities are easily reached through their respective panels. Because this tool is also available for Windows, it allows a much easier transition to Linux for those who have been using it under Windows. Find more information about Opera at http://www.opera.com/.

Skype
: Skype is an application for several platforms (Linux, Windows, Mac Os X) that can be used for phone calls over the Internet with a good sound quality and with end-to-end encryption. When using Skype, configuring the firewall or router is not necessary. For more information, refer to http://www.skype.com/products/.

XChat
: XChat is an IRC client that runs on most Linux and UNIX platforms as well as under Windows and MacOS X. Find more information about XChat at http://www.xchat.org/.

C.3 Multimedia

The following section introduces the most popular multimedia applications for Linux. Get to know media players, sound editing solutions, and video editing tools.

Table C.3 *Multimedia Software for Windows and Linux*

Task	Windows Application	Linux Application
Audio CD Player	CD Player, Winamp, Windows Media Player	KsCD, Grip, Helix Banshee
CD Burner	Nero, Roxio Easy CD Creator	K3b
CD Ripper	WMPlayer	kaudiocreator, Sound Juicer, Helix Banshee
Audio Player	Winamp, Windows Media Player, iTunes	amaroK, XMMS, Rhythmbox, Helix Banshee
Video Player	Winamp, Windows Media Player	Kaffeine, MPlayer, Xine, XMMS, Totem, RealPlayer
Audio Editor	SoundForge, Cooledit, Audacity	Audacity

Task	Windows Application	Linux Application
Sound Mixer	sndvol32	alsamixer, Kmix
Music Notation	Finale, SmartScore, Sibelius	LilyPond, MusE, Noteedit, Rosegarden
Video Creator and Editor	Windows Movie Maker, Adobe Premiere, Media Studio Pro, MainActor	MainActor, Kino
TV Viewer	AVerTV, PowerVCR 3.0, CinePlayer DVR	xawtv (analog), motv (analog), xawtv4, tvtime, kdetv, zapping, Kaffeine

amaroK
: The amaroK media player handles various audio formats and plays the streaming audio broadcasts of radio stations on the Internet. The program handles all file types supported by the sound server acting as a back-end—currently aRts or GStreamer. Find more information about amaroK at `http://amarok.kde.org/`. You can also read our amaroK chapter.

Audacity
: Audacity is a powerful, free sound editing tool. Record, edit, and play any Ogg Vorbis or WAV file. Mix tracks, apply effects to them, and export the results to WAV or Ogg Vorbis. Find more information about Audacity at `http://audacity.sourceforge.net/`.

Helix Banshee
: Helix Banshee is a music management and playback application for the GNOME desktop. With Helix Banshee, import CDs, sync your music collection to an iPod, play music directly from an iPod, create playlists with songs from your library, and create audio and MP3 CDs from subsets of your library. For more information, refer to *GNOME User Guide*.

Grip
: Grip provides CD player functionalities for the GNOME desktop. It supports CDDB lookups for track and album data. Find more information at `http://www.nostatic.org/grip/`.

Kaffeine
: Kaffeine is a versatile multimedia application supporting a wide range of audio and video formats including Ogg Vorbis, WMV, MOV, and AVI. Import and edit play lists of various types, create screen shots, and save media streams to your local hard disk. Find more information about Kaffeine at http://kaffeine.sourceforge.net/.

KAudiocreator
: KAudioCreator is a lean CD ripper application. If configured accordingly, KAudioCreator also generates playlist files for your selection that can be used by players like amaroK, XMMS, or Helix Banshee. Read more about using KAudioCreator in *KDE User Guide* or go to http://www.icefox.net/programs/?program=KAudioCreator.

kdetv
: A TV viewer and recorder application for the KDE desktop supporting analog TV. Find more information about kdetv at http://www.kdetv.org/.

KsCD
: KsCD is a neat little CD player application for the KDE desktop. Its user interface very much resembles that of a normal hardware CD player, guaranteeing ease of use. KsCD supports CDDB, enabling you to get any track and album information from the Internet or your local file system. Find more information at http://docs.kde.org/en/3.3/kdemultimedia/kscd/.

K3b
: K3b is a multitalented media creation tool. Create data, audio, or video CD and DVD projects by dragging and dropping. Find more information about K3b at http://www.k3b.org/. You can also refer to our K3b chapter.

LilyPond
: LilyPond is a free music sheet editor. Because the input format is text-based, you can use any text editor to create note sheets. Users do not need to tackle any formatting or notation issues, like spacing, line-breaking, or polyphonic collisions. All these issues are automatically resolved by LilyPond. It supports many special notations like chord names and tablatures. The output can be exported to PNG, TeX, PDF, PostScript, and MIDI. Find more information about LilyPond at http://lilypond.org/web/.

MainActor
: MainActor is a fully fledged video authoring software. Because there is a Windows version of MainActor, transition from Windows is easy. Find more information about MainActor at http://www.mainactor.com/.

MPlayer
: MPlayer is a movie player that runs on several systems. Find more information about MPlayer at http://www.mplayerhq.hu/homepage/design7/info.html.

MusE
: MusE's goal is to be a complete multitrack virtual studio for Linux. Find more information about MusE at http://www.muse-sequencer.org/index.php.

Noteedit
: Noteedit is a powerful score editor for Linux. Use it to create sheets of notes and to export and import scores to and from many formats, such as MIDI, MusicXML and LilyPond. Find more information about Noteedit at http://developer.berlios.de/projects/noteedit/.

Rhythmbox
: Rhythmbox is a powerful, multitalented media player for the GNOME desktop. It allows you to organize and browse your music collection using playlists and even supports Internet radio. Find more information about Rhythmbox at http://www.gnome.org/projects/rhythmbox/.

Rosegarden
: Rosegarden is a free music composition and editing environment. It features an audio and MIDI sequencer and a score editor. Find more information about Rosegarden at http://rosegardenmusic.com/.

Sound Juicer
: Sound Juicer is a lean CD ripper application for the GNOME desktop. Find more information about Sound Juicer at http://www.burtonini.com/blog/computers/sound-juicer.

Totem
: Totem is a movie player application for the GNOME desktop. It supports Shoutcast, m3u, asx, SMIL, and ra playlists, lets you use keyboard controls, and plays a wide

range of audio and video formats. Find more information about Totem at http://www.gnome.org/projects/totem/.

tvtime
: tvtime is a lean TV viewer application supporting analog TV. Find more information about tvtime, including a comprehensive usage guide, at http://tvtime.sourceforge.net/.

xawtv and motv
: xawtv is a TV viewer and recorder application supporting analog TV. motv is basically the same as xawtv, but with a slightly different user interface. Find more information about the xawtv project at http://linux.bytesex.org/xawtv/.

xawtv4
: xawtv4 is a successor of the xawtv application. It supports both analog and digital audio and video broadcasts. For more information, refer to http://linux.bytesex.org/xawtv/.

Xine
: Xine is a multimedia player that plays CDs, DVDs, and VCDs. It interprets many multimedia formats. For more information, refer to http://xinehq.de/.

XMMS
: XMMS is the traditional choice for multimedia playback. It is focused on music playback, offering support for CD playback and Ogg Vorbis files. Users of Winamp should find XMMS comfortable because of its similarity. Find more information about XMMS at http://www.xmms.org/.

zapping
: A TV viewer and recorder application for the GNOME desktop supporting analog TV. Find more information about Zapping at http://zapping.sourceforge.net/cgi-bin/view/Main/WebHome.

C.4 Graphics

The following section presents some of the Linux software solutions for graphics work. These include simple drawing applications as well as fully-fledged image editing tools and powerful rendering and animation programs.

Table C.4 *Graphics Software for Windows and Linux*

Task	Windows Application	Linux Application
Simple Graphic Editing	MS Paint	KolourPaint
Professional Graphic Editing	Adobe Photoshop, Paint Shop Pro, Corel PhotoPaint, The GIMP	The GIMP, Krita
Creating Vector Graphics	Adobe Illustrator, CorelDraw, OpenOffice.org Draw, Freehand	OpenOffice.org Draw, Inkscape, Dia
SVG Editing	WebDraw, Freehand, Adobe Illustrator	Inkscape, Dia, Kivio
Creating 3D Graphics	3D Studio MAX, Maya, POV-Ray, Blender	POV-Ray, Blender, KPovmodeler
Managing Digital Photographs	Software provided by the camera manufacturer	Digikam, f-spot
Scanning	Vuescan	Vuescan, The GIMP
Image Viewing	ACDSee	gwenview, gThumb, Eye of Gnome, f-spot

Blender
: Blender is a powerful rendering and animation tool available on many platforms, including Windows, MacOS, and Linux. Find more information about Blender at `http://www.blender3d.com/`.

Dia
: Dia is a Linux application aiming to be the Linux equivalent of Visio. It supports many types of special diagrams, such as network or UML charts. Export formats include SVG, PNG, and EPS. To support your own custom diagram types, provide the new shapes in a special XML format. Find more information about Dia at `http://www.gnome.org/projects/dia/`.

Digikam
: Digikam is a smart digital photo management tool for the KDE desktop. Importing and organizing your digital images is a matter of a few clicks. Create albums, add tags to spare you from copying images around different subdirectories, and eventually export your images to your own Web site. Find more information about Digikam at http://www.digikam.org/. You can also refer to our Digikam chapter.

Eye of Gnome (eog)
: Eye of Gnome is an image viewer application for the GNOME desktop. Find more information at http://www.gnome.org/gnome-office/eog.shtml.

f-spot
: f-spot is a flexible digital photograph management tool for the GNOME desktop. It lets you create and manage albums and supports various export options like HTML pages or burning of image archives to CD. You can also use it as an image viewer on the command line. Find more information about f-spot at http://www.gnome.org/projects/f-spot/. You can also refer to our chapter in *GNOME User Guide*.

gThumb
: gThumb is an image viewer, browser, and organizer for the GNOME desktop. It supports the import of your digital images via gphoto2, allows you to carry out basic transformation and modifications, and lets you tag your images to create albums matching certain categories. Find more information about gThumb at http://gthumb.sourceforge.net/.

Gwenview
: Gwenview is a simple image viewer for KDE. It features a folder tree window and a file list window that provides easy navigation of your file hierarchy. Find more information at http://gwenview.sourceforge.net/home/.

Inkscape
: Inkscape is a free SVG editor. Users of Adobe Illustrator, Corel Draw, and Visio can find a similar range of features and a familiar user interface in Inkscape. Among its features, find SVG-to-PNG export, layering, transforms, gradients, and grouping of objects. Find more information about Inkscape at http://www.inkscape.org/.

Kivio
: Kivio is a flow-charting application that integrates into the KOffice suite. Former users of Visio find a familiar look and feel in Kivio. Find more information about Kivio at http://www.koffice.org/kivio/.

KolourPaint
: KolourPaint is an easy-to-use paint program for the KDE desktop. You can use it for tasks such as painting or drawing diagrams and editing screen shots, photos, and icons. For more information, refer to http://kolourpaint.sourceforge.net/.

KPovmodeler
: KPovmodeler is a POV-Ray front-end that integrates with the KDE desktop. KPovmodeler saves users from needing a detailed knowledge of POV-Ray scripting by translating the POV-Ray language in an easy-to-understand tree view. Native POV-Ray scripts can be imported to KPovmodeler as well. Find more information at http://www.kpovmodeler.org.

Krita
: Krita is KOffice's answer to Adobe Photoshop and The GIMP. It can be used for pixel-based image creation and editing. Its features include many of the advanced image editing capabilities you would normally expect with Adobe Photoshop or The GIMP. Find more information at http://www.koffice.org/krita.

OpenOffice.org Draw
: See OpenOffice.org (page 226).

POV-Ray
: The Persistence of Vision Raytracer creates three-dimensional, photo-realistic images using a rendering technique called ray tracing. Because there is a Windows version of POV-Ray, it does not take much for Windows users to switch to the Linux version of this application. Find more information about POV-Ray at http://www.povray.org/.

The GIMP
: The GIMP is the open source alternative to Adobe Photoshop. Its feature list rivals that of Photoshop, so it is well suited for professional image manipulation. There is even a Windows version of GIMP available. Find more information at http://www.gimp.org/. You can also refer to our GIMP chapter.

VueScan

VueScan is a scanning software available for several platforms. You can install it parallel to your vendor's scanner software. It supports the scanner's special hardware, like batch scanning, autofocus, infrared channels for dust and scratch suppression, and multiscan to reduce scanner noise in the dark areas of slides. It features simple and accurate color correction from color negatives. Find out more at http://www.hamrick.com/index.html.

C.5 System and File Management

The following section provides an overview of Linux tools for system and file management. Get to know text and source code editors, backup solutions, and archiving tools.

Table C.5 *System and File Management Software for Windows and Linux*

Task	Windows Application	Linux Application
File Manager	Windows Explorer	Konqueror, Nautilus
Text Editor	NotePad, WordPad, (X)Emacs	kate, GEdit, (X)Emacs, vim
PDF Creator	Adobe Distiller	Scribus
PDF Viewer	Adobe Reader	Adobe Reader, Evince, KPDF, Xpdf
Text Recognition	Recognita, FineReader	GOCR
Command Line Pack Programs	zip, rar, arj, lha, etc.	zip, tar, gzip, bzip2, etc.
GUI Based Pack Programs	WinZip	Ark, File Roller
Hard Disk Partitioner	PowerQuest, Acronis, Partition Commander	YaST, GNU Parted

Task	Windows Application	Linux Application
Backup Software	ntbackup, Veritas	KDar, taper, dump

Adobe Reader
: Adobe Reader for Linux is the exact counterpart of the Windows and Mac versions of this application. The look and feel on Linux are the same as on other platforms. The other parts of the Adobe Acrobat suite have not been ported to Linux. Find more information at http://www.adobe.com/products/acrobat/readermain.html.

Ark
: Ark is a GUI-based pack program for the KDE desktop. It supports common formats, such as `zip`, `tar.gz`, `tar.bz2`, `lha`, and `rar`. You can view, select, pack, and unpack single files within an archive. Due to Ark's integration with Konqueror, you can also trigger actions (such as unpacking an archive) from the context menu in the file manager, similar to WinZip. For a short introduction to using Ark, refer to our KDE Desktop chapter.

dump
: The dump package contains both dump and restore. dump examines files in a file system, determines which ones need to be backed up, and copies those files to a specified disk, tape, or other storage medium. The restore command performs the inverse function of dump—it can restore a full backup of a file system. Find more information at http://dump.sourceforge.net/.

Evince
: Evince is a document viewer for PDF and PostScript formats for the GNOME desktop. Find more information at http://www.gnome.org/projects/evince/.

File Roller
: File Roller is a GUI-based pack program for the GNOME desktop. It provides features similar to Ark's. For more information, refer to http://fileroller.sourceforge.net/home.html.

GEdit
: GEdit is the official text editor of the GNOME desktop. It provides features similar to Kate's. Find more information at http://www.gnome.org/projects/gedit/.

GNU Parted
: GNU Parted is a command line tool for creating, destroying, resizing, checking, and copying partitions and the file systems on them. If you need to create space for new operating systems, use this tool to reorganize disk usage and copy data between different hard disks. Find more information at http://www.gnu.org/software/parted/.

GOCR
: GOCR is an OCR (optical character recognition) tool. It converts scanned images of text into text files. Find more information at http://jocr.sourceforge.net/.

gzip, tar, bzip2
: There are plenty of packaging programs for reducing disk usage. In general, they differ only in their pack algorithm. Linux can also handle the packaging formats used on Windows. `bzip2` is a bit more efficient than `gzip`, but needs more time, depending on the pack algorithm. Find more information about `gzip` and `tar` in our Shell chapter.

kate
: Kate is part of the KDE suite. It has the ability to open several files at once either locally or remotely. With syntax highlighting, project file creation, and external scripts execution, it is a perfect tool for a programmer. Find more information at http://kate.kde.org/.

KDar
: KDar stands for KDE disk archiver and is a hardware-independent backup solution. KDar uses catalogs (unlike tar), so it is possible to extract a single file without reading the whole archive and it is also possible to create incremental backups. KDar can split an archive into multiple slices and trigger the burning of a data CD or DVD for each slice. Find more information about KDar at http://kdar.sourceforge.net/.

Konqueror

Konqueror is the default file manager for the KDE desktop, which can also be used as a Web browser, document and image viewer, and CD ripper. For an introduction to using Konqueror as a file manager, see *KDE User Guide*. Find more information about this multifunctional application at http://www.konqueror.org/.

KPDF

KPDF is a PDF viewing application for the KDE desktop. Its features include searching the PDF and full screen reading mode like in Adobe Reader. Find more information at http://kpdf.kde.org/.

Nautilus

Nautilus is the default file manager of the GNOME desktop. It can be used to create folders and documents, display and manage your files and folders, run scripts, write data to a CD, and open URI locations. For an introduction to using Nautilus as a file manager, see the *GNOME User Guide*. Find information about Nautilus on the Internet at http://www.gnome.org/projects/nautilus/.

taper

Taper is a backup and restore program that provides a friendly user interface to allow backup and restoration of files to and from a tape drive. Alternatively, files can be backed up to archive files. Recursively selected directories are supported. Find more information at http://taper.sourceforge.net/.

vim

vim (vi improved) is a program similar to the text editor vi. Users may need time to adjust to vim, because it distinguishes between command mode and insert mode. The basic features are the same as in all text editors. vim offers some unique options, like macro recording, file format detection and conversion, and multiple buffers in a screen. Find more information at http://www.vim.org/.

(X)Emacs

GNU Emacs and XEmacs are very professional editors. XEmacs is based on GNU Emacs. To quote the GNU Emacs Manual, "Emacs is the extensible, customizable, self-documenting real-time display editor." Both offer nearly the same functionality with minor differences. Used by experienced developers, they are highly extensible through the Emacs Lisp language. They support many languages, like Russian, Greek, Japanese, Chinese, and Korean. Find more information at http://www.xemacs.org/ and http://www.gnu.org/software/emacs/emacs.html.

Xpdf
: Xpdf is lean PDF viewing suite for Linux and Unix platforms. It includes a viewer application and some export plug-ins for PostScript or text formats. Find more information at http://www.foolabs.com/xpdf/.

C.6 Software Development

This section introduces Linux IDEs, toolkits, development tools, and versioning systems for professional software development.

Table C.6 *Development Software for Windows and Linux*

Task	Windows Application	Linux Application
Integrated Development Environments	Borland C++, Delphi, Visual Studio, .NET	KDevelop, Eric, Eclipse, MonoDevelop, Anjuta
Toolkits	MFC, Qt, GTK+	Qt, GTK+
Compilers	VisualStudio	GCC
Debugging Tools	Visual Studio	GDB, valgrind
GUI Design	Visual Basic, Visual C++	Glade, Qt Designer
Versioning Systems	Clearcase, Perforce, SourceSafe	CVS, Subversion

Anjuta
: Anjuta is an IDE for GNOME/GTK+ application development. It includes an editor with automated formatting, code completion, and highlighting. As well as GTK+, it supports Perl, Pascal, and Java development. A GDB-based debugger is also included. Find more information about Anjuta at http://anjuta.sourceforge.net.

CVS
: CVS, the Concurrent Versions System, is one of the most important version control systems for open source. It is a front-end to the Revision Control System (RCS)

included in the standard Linux distributions. Find more information at the home page http://www.cvshome.org/.

Eclipse
: The Eclipse Platform is designed for building integrated development environments that can be extended with custom plug-ins. The base distribution also contains a full-featured Java development environment. Find more information at http://www.eclipse.org.

Eric
: Eric is an IDE optimized for Python and Python-Qt development. Find more information about Eric at http://www.die-offenbachs.de/detlev/eric3.html.

GCC
: GCC is a compiler collection with front-ends for various programming languages. Check out a complete list of features and find extensive documentation at http://gcc.gnu.org.

GDB
: GDB is a debugging tool for programs written in various programming languages. Find more information about GDB at http://www.gnu.org/software/gdb/gdb.html.

Glade
: Glade is a user interface builder for GTK+ and GNOME development. As well as GTK+ support, it offers support for C, C++, C#, Perl, Python, Java, and others. Find more information about Glade at http://glade.gnome.org/.

GTK+
: GTK+ is a multiplatform toolkit for creating graphical user interfaces. It is used for all GNOME applications, The GIMP, and several others. GTK+ has been designed to support a range of languages, not only C/C++. Originally it was written for GIMP, hence the name "GIMP Toolkit." Find more information at http://www.gtk.org. Language bindings for GTK+ are summarized under http://www.gtk.org/bindings.html.

KDevelop
: KDevelop allows you to write programs for different languages (C/C++, Python, Perl, etc.). It includes a documentation browser, a source code editor with syntax

highlighting, a GUI for the compiler, and much more. Find more information at http://www.kdevelop.org.

MonoDevelop
: The Mono Project is an open development initiative that is working to develop an open source Unix version of the .NET development platform. Its objective is to enable Unix developers to build and deploy cross-platform .NET applications. MonoDevelop complements the Mono development with an IDE. Find more information about MonoDevelop at http://www.monodevelop.com/.

Qt
: Qt is a program library for developing applications with graphical user interfaces. It allows you to develop professional programs rapidly. The Qt library is available not only for Linux, but for a number of Unix flavors and even for Windows and Macintosh. Thus it is possible to write programs that can be easily ported to those platforms. Find more information at http://www.trolltech.com. Language bindings for Qt development are summarized under http://developer.kde.org/language-bindings/.

Qt Designer
: Qt Designer is a user interface and form builder for Qt and KDE development. It can be run as part of the KDevelop IDE or in stand-alone mode. QtDesigner can be run under Windows and even integrates into the Visual Studio development suite. Find more information about Qt Designer at http://www.trolltech.com/products/qt/designer.html.

Subversion
: Subversion does the same thing CVS does but has major enhancements, like moving, renaming, and attaching meta information to files and directories. The Subversion home page is http://subversion.tigris.org/.

Valgrind
: Valgrind is a suite of programs for debugging and profiling x86 applications. Find more information about Valgrind at http://valgrind.org/info/.

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D

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To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

one line to give the program's name and an idea of what it does. Copyright (C) yyyy name of author

```
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```

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If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details
type `show w'. This is free software, and you are welcome
to redistribute it under certain conditions; type `show c'
for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called some-

thing other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright
interest in the program `Gnomovision'
(which makes passes at compilers) written
by James Hacker.

signature of Ty Coon, 1 April 1989
Ty Coon, President of Vice
```

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Version 1.2, November 2002

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